



## Summary

### Main Features

A Data Cube containing Types of Employment can be found in the July 2005 issue from the Details Tab and under the Past & Future Releases tab above.

A Data Cube containing Measures of Labour Underutilisation can be found in the April 2005 issue from the Details Tab and under the Past & Future Releases tab above.

### LABOUR STATISTICS NEWS

#### LABOUR THEME PAGE

The ABS Labour Theme Page, available on the ABS web site, provides a guide to the range of ABS statistics on the labour market, as well as links to the latest data released.

#### FREE DATA ON THE WEB

The entire content of the ABS website became accessible free of charge from Monday 12 December 2005. This follows all ABS publications becoming accessible free of charge on 1 July 2005. A web page with more information and frequently asked questions is now available: <https://www.abs.gov.au/about/pricing>.

### COMPARISON OF METHODS FOR MEASURING THE AGE OF WITHDRAWAL FROM THE LABOUR FORCE

**Research Paper: Comparison of Methods for Measuring the Age of Withdrawal from the Labour Force (cat. no. 1351.0.55.009)** was released 10 November 2005. This paper explores the use of three summary methods for calculating the age of withdrawal from the labour force. Two of these methods estimate the 'expected' age of withdrawal, while the third method estimates the 'average' age of withdrawal. Each method has its own advantages and disadvantages which need to be considered in the context of the specific research question and available data sources.

### 2006 SURVEY OF EMPLOYEE EARNINGS AND HOURS

The two-yearly Survey of Employee Earnings and Hours (EEH) will next be conducted in May 2006. EEH provides statistics on earnings and hours paid for, as well as the coverage and pay outcomes of employees on awards, registered agreements and informal arrangements. As a result of the changes to the workplace relations system there had been some doubt about the feasibility of collecting data on pay setting arrangements. Key users of these statistics have now been consulted and ABS has decided to collect data on pay setting arrangements in May 2006 on a similar basis to previous surveys. The survey questions relating to pay setting will then be redeveloped to take into account the new workplace relations system, with the redeveloped questions to be introduced for the May 2008 EEH survey.

### LABOUR STATISTICS: CONCEPTS, SOURCES AND METHODS

**Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001) was updated on 15 December 2005. A new chapter covering the Multi Purpose Household Survey was added and a number of existing chapters were updated.

### MULTI PURPOSE HOUSEHOLD SURVEY

The Multi Purpose Household Survey was introduced in 2004-05. This survey provides statistics annually for a number of small, self-contained topics, including labour topics. Two labour-related topics were conducted in 2004-05: a topic on retirement and a topic covering labour force participation. **Retirement and Retirement Intentions** (cat. no. 6238.0) and **Barriers and Incentives to Labour Force Participation** (cat. no. 6239.0) will be released in early 2006.

### SUPPLEMENTARY SURVEYS ON LABOUR TOPICS

The Monthly Population Survey comprises the Labour Force Survey and a range of supplementary surveys, which provide detailed information on a range of topics. **Education and Work, Australia** (cat. no. 6227.0) and **Job Search Experience, Australia** (cat. no. 6222.0) were released on 14 December 2005. See the Recent Releases in this issue for more details.

## ABS EMAIL NOTIFICATION SERVICE

By subscribing to this free service, you will be kept informed via email of the latest releases of ABS products. To subscribe, follow the link from the ABS home page <<https://www.abs.gov.au>>, provide your email address, and select your topics of interest.

### Recent and upcoming statistical releases

Release date/title of publication	Reference period	Catalogue number
December 2005		
Education and Work, Australia	May 2005	6227.0
Industrial Disputes, Australia	September quarter 2005	6321.0.55.001
Job Search Experience, Australia	July 2005	6222.0
Labour Force, Australia	November 2005	6202.0
Labour Force, Australia - Detailed Delivery	November 2005	6291.0.55.001
Labour Statistics: Concepts, Sources and Methods	2005	6102.0.55.001
Wage and Salary Earners, Public Sector, Australia	September quarter 2005	6248.0.55.001
January 2006		
Australian Labour Market Statistics	January 2006	6105.0
Barriers and Incentives to Labour Force Participation, Australia	August 2004 to June 2005	6239.0
Job Vacancies, Australia	November 2005	6354.0
Labour Force, Australia	December 2005	6202.0
Labour Force, Australia - Detailed Delivery	December 2005	6291.0.55.001
Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Experimental Estimates from the	2002-2004	6287.0
Labour Force Survey		
Year Book Australia	2006	1301.0
Retirement and Retirement Intentions, Australia	August 2004 to June 2005	6238.0
February 2006		
Australian and New Zealand Standard Industrial Classification (ANZSIC)	2006	1292.0
Average Weekly Earnings, Australia	November 2005	6302.0
Household Expenditure Survey and Survey of Income and Housing - Confidentialised Unit Record Files	2003-04	6540.0
Household Expenditure Survey and Survey of Income and Housing - Confidentialised Unit Record Files, Technical Paper	2003-04	6540.0.00.001
Household Expenditure Survey and Survey of Income and Housing, User Guide	2003-04	6503.0
Labour Force, Australia	January 2006	6202.0
Labour Force, Australia - Detailed Delivery	January 2006	6291.0.55.001
Labour Price Index, Australia	December quarter 2005	6345.0
March 2006		
Employee Earnings, Benefits and Trade Union Membership, Australia	August 2005	6310.0
Industrial Disputes, Australia	December quarter 2005	6321.0.55.001
Job Vacancies, Australia	February 2006	6354.0
Labour Force, Australia	February 2006	6202.0
Labour Force, Australia - Detailed Delivery	February 2006	6291.0.55.001
Persons Not in the Labour Force, Australia	September 2005	6220.0
Survey of Education and Work, Australia, Confidentialised Unit Record File on CD-ROM	May 2005	6227.0.30.001
Underemployed Workers, Australia	September 2005	6265.0
Wage and Salary Earners, Public Sector, Australia	December quarter 2005	6248.0.55.001
April 2006		
Australian Labour Market Statistics	April 2006	6105.0
Characteristics of Small Business, Australia	2005	8127.0
Labour Force, Australia	March 2006	6202.0
Labour Force, Australia - Detailed Delivery	March 2006	6291.0.55.001
Measures of Australia's Progress	2006	1370.0
Multi-Purpose Household Survey 2004-2005, Expanded Confidentialised Unit Record File	2004-05	4100.0.55.001
Multi-Purpose Household Survey 2004-2005, Expanded Confidentialised Unit Record File, Technical Paper	2004-05	4100.0

## NOTES

### FORTHCOMING ISSUES

#### ISSUE (QUARTER)

April 2006  
July 2006

#### Release Date

3 April 2006  
7 July 2006

### DATA CONTAINED IN THIS ISSUE

The statistics shown are the latest available at 16 December 2005. Data sources for the tables in this publication are listed in Appendix 1.

### ELECTRONIC PRODUCTS

The spreadsheets and data cubes referenced in this publication are available on the ABS web site at <<https://www.abs.gov.au>> [AusStats - Publications and Data], then [Data Cubes] or [Time Series Spreadsheets].

### INQUIRIES

For information about other Australian Bureau of Statistics (ABS) statistics and services, please refer to the back of this publication.

## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Assistant Director, Labour Market Statistics on Canberra (02) 6252 7636.

## LABOUR MARKET SUMMARY

### KEY MEASURES

Measure		Series type	Period	Current figure	% change from	
					Previous quarter(a)	Previous year(b)
Employed						
Persons	'000	Trend	Nov 2005	10 028.4	0.0	2.3
Full-time	'000	Trend	Nov 2005	7 134.1	-0.4	1.9
Part-time	'000	Trend	Nov 2005	2 894.3	0.8	3.6
Part-time employment as a proportion of total employment	%	Trend	Nov 2005	28.9	(c)0.2	(c)0.3
Unemployed						
Persons	'000	Trend	Nov 2005	541.5	1.4	-0.1
Looking for full-time work	'000	Trend	Nov 2005	386.0	2.5	0.0
Looking for part-time work	'000	Trend	Nov 2005	155.5	-1.3	-0.5
Unemployment rate						
Persons	%	Trend	Nov 2005	5.1	(c)0.1	(c)-0.1
Long-term unemployment						
Persons	'000	Trend	Nov 2005	97.3	4.7	-8.7
As a proportion of total unemployment	%	Trend	Nov 2005	18.0	(c)0.6	(c)-1.7
Annual labour underutilisation rates(d)						
Long-term unemployment rate	%	Original	Sep 2004	1.2	na	(c)-0.1
Unemployment rate	%	Original	Sep 2004	5.5	na	(c)-0.4
Underemployment rate	%	Original	Sep 2004	5.6	na	(c)0.0
Labour force underutilisation rate	%	Original	Sep 2004	11.1	na	(c)-0.4
Extended labour force underutilisation rate	%	Original	Sep 2004	12.2	na	(c)-0.3
Children living without an employed parent(e)	%	Original	Jun 2005	14.9	na	(c)-2.3
Labour force participation rate						
Persons aged 15-64 years	%	Original	Nov 2005	75.1	(c)0.0	(c)0.8
Total	%	Trend	Nov 2005	64.4	(c)-0.2	(c)0.6
Actual hours worked						
Aggregate weekly hours	mill. hours	Original	Nov 2005	342.9	-1.0	1.4
Average weekly hours - Persons	hours	Original	Nov 2005	34.2	-1.4	-0.9
Average weekly hours - Full-time	hours	Original	Nov 2005	41.4	-1.5	-0.8
Average weekly hours - Part-time	hours	Original	Nov 2005	16.5	-2.3	0.2
Part-time workers						
Proportion who preferred to work more hours	%	Original	Nov 2005	24.9	(c)1.0	(c)-1.0
Wage price index						
Total hourly rates of pay excluding bonuses	index no.	Trend	Sep qtr 2005	106.5	1.0	4.2
Average weekly earnings						
Full-time adult ordinary time earnings	\$	Trend	Aug 2005	1 022.60	1.5	6.2
All employees total earnings	\$	Trend	Aug 2005	805.40	1.4	6.2
Compensation of employees						
Household income account	\$m	Trend	Sep qtr 2005	111 245	1.8	7.3
Average earnings (National Accounts basis nominal) per week	\$	Trend	Sep qtr 2005	972	1.1	3.5
Industrial disputes						
Working days lost	'000	Original	Sep qtr 2005	53.9	2.0	-42.3
Working days lost per 1,000 employees	number	Original	Sep qtr 2005	6.2	2.8	-44.9
Job vacancies						
Australia	'000	Trend	Aug 2005	140.9	-1.8	9.0

na not available

(a) Same period previous quarter (monthly data is presented for the middle month of each quarter).

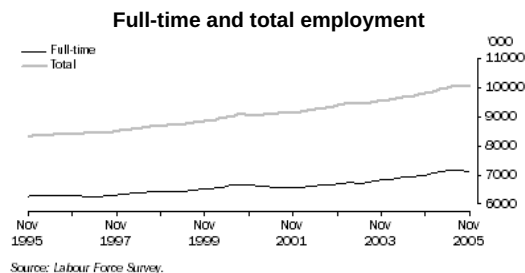
(b) Same period previous year.

(c) Change is in percentage points.

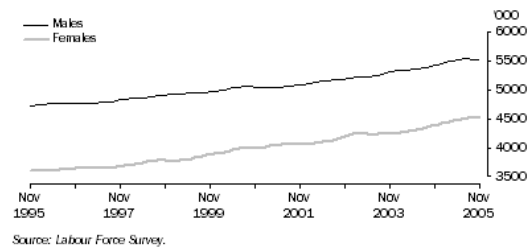
(d) See table 4.1 or the Glossary for further explanation of labour underutilisation rates.

(e) As a proportion of all children aged under 15 years. See the Explanatory Notes for information on family data.

### EMPLOYMENT: TREND SERIES

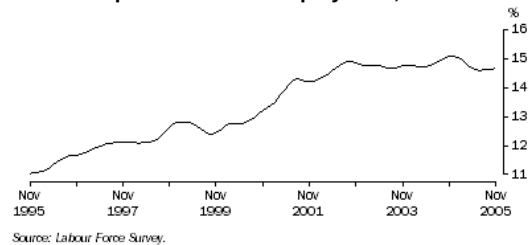


### Males and females



## PART-TIME EMPLOYMENT: TREND SERIES

Proportion of total employment, Males

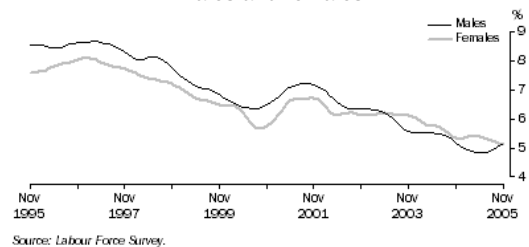


Proportion of total employment, Females



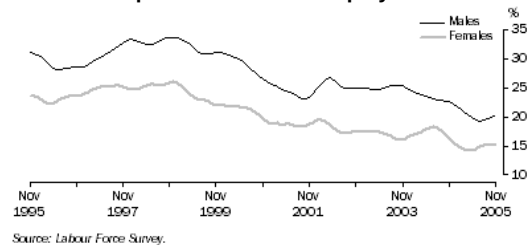
## UNEMPLOYMENT RATE: TREND SERIES

Males and females



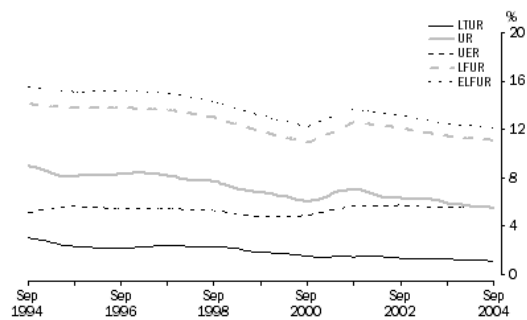
## LONG-TERM UNEMPLOYMENT: TREND SERIES

Proportion of total unemployment



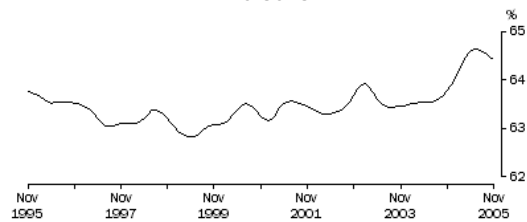
## UNDERUTILISED LABOUR

Labour underutilisation rates - 1994-2004

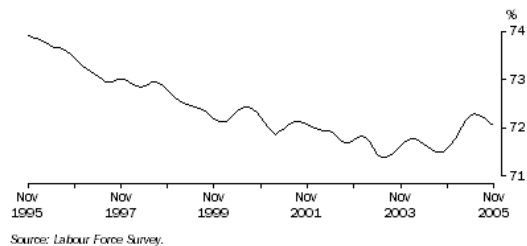


## PARTICIPATION RATE: TREND SERIES

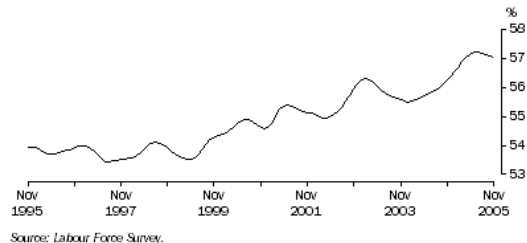
### Persons



### Males

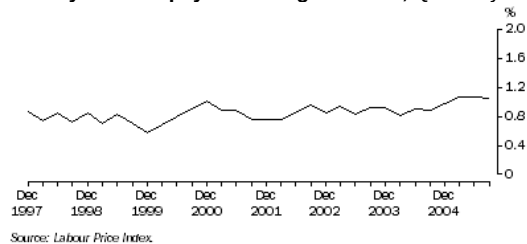


### Females



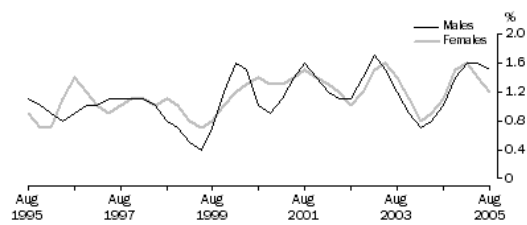
## WAGE PRICE INDEX: TREND SERIES

### Total hourly rates of pay excluding bonuses, Quarterly change

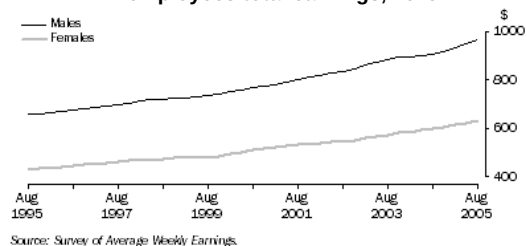


## AVERAGE WEEKLY EARNINGS: TREND SERIES

### Full-time adult ordinary time earnings, Quarterly change

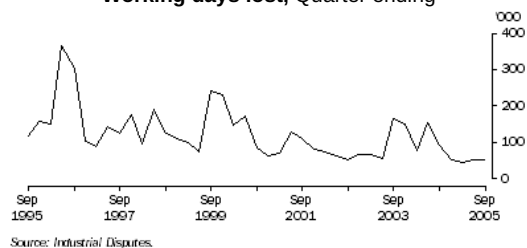


**All employees total earnings, Level**



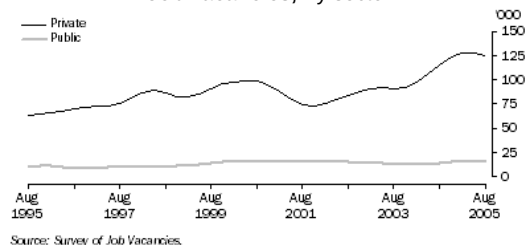
## INDUSTRIAL DISPUTES: ORIGINAL SERIES

**Working days lost, Quarter ending**



## JOB VACANCIES: TREND SERIES

**Job vacancies, By sector**



## About this Release

Replaces: Labour Force, Australia 6203.0

This publication is the flagship release for all ABS labour statistics. It draws together data from a range of sources, mostly ABS household and business surveys, to provide an overall picture of the labour market. The key purpose of this publication is to raise awareness of the data available, so that users will be able to use it more effectively.

It contains tables for core data items, presenting the most recent data available at a particular date (rather than relating to a particular reference period). It is also able to be used to announce the release of supplementary surveys and infrequent surveys. Note that, in addition to a brief article in this publication, these would also have separate releases, which would not be delayed by the release in this publication.

The publication is also used to release annual data on Indigenous labour force status, and annual supplementary measures of labour underutilisation. It includes a range of feature articles, both analytical and technical, which will assist users in understanding and interpreting the data and will also promote the range of data available from the ABS labour statistics program. It will be used to announce any changes to labour series or releases.

The publication contains brief explanatory notes, outlining each data source, but referring to the relevant releases, and to Labour Statistics: Concepts, Sources and Methods 6102.0.55.001, for more detail.

## Long-term unemployment (Feature Article)

## LONG-TERM UNEMPLOYMENT

### INTRODUCTION

Long-term unemployment impacts on communities both socially and economically. People who are unemployed long-term may have difficulty in gaining employment due to a number of factors including: a loss of confidence and motivation, a lack of recent work experience, or inappropriate skills. They may also perceive that there are high levels of competition for a limited number of opportunities. Compared to those who are unemployed for shorter periods of time, the long-term unemployed may also experience difficulty in overcoming the negative perceptions of some employers (Australian Bureau of Statistics, 2000). Long-term unemployment may also erode the social or work connections that people need to secure employment (Davidson, 2002).

Long-term unemployment is defined as a duration of unemployment of 12 months or more. Duration of employment is the length of the incomplete spell of unemployment of a currently unemployed person. The duration is calculated from the time a person either last worked in any job for two weeks or more, or began actively looking for work (whichever is the more recent). **(end note 1)** In September 2005, of those people aged 15 years or over, there were 94,000 considered to be long-term unemployed. Although these figures have fallen since the early 1990s to low levels they are still of importance. Long-term unemployment may be linked to an increased risk of poverty, as well as an associated burden on the welfare system (Ross, 2002).

This article provides a brief overview of some of the information available relating to long-term unemployment, including some of the characteristics of the long-term unemployed.

### MEASURES OF LONG-TERM UNEMPLOYMENT

The long-term unemployment rate is the number of people who have been unemployed for one year or more, as a proportion of the labour force. From 1991 to 1999, this rate was above 2%, reaching a peak of 3.7% in mid-1993. In September 2004, the rate was 1.1%. From early 2005, the rates recorded have been the lowest in the past two decades, with a rate of 0.9% in September 2005.

The long-term unemployment rate generally mirrors the unemployment rate, fluctuating with the peaks and troughs of the economy. The last major peak in the rate of long-term unemployment occurred in 1993, soon after the economic downturn of 1990-91.

1. Unemployment and long-term unemployment rates, Proportion of labour force: Trend



In September 2005 the long-term unemployed represented 18% of all unemployed people. This ratio decreased from 20% in September 2004, when there were 114,500 long-term unemployed, representing one-fifth of all unemployed people.

2. Long-term unemployed, Proportion of unemployed: Trend



### AGE

Young people aged 15-24 years tend to experience higher rates of unemployment but relatively low proportions of long-term unemployment. This is mostly due to the large inflow of school leavers into short term unemployment (Furlong and Kelly, 2005). Unemployed people aged 45 years or older are more likely to be long-term unemployed. As shown in graph 3, 42% of unemployed people aged 55-64 years had been unemployed for one year or more.

The higher incidence of long-term unemployment among older unemployed people may be explained by a number of factors, including lower mobility, lower education level, lower capacity for job-hunting, lower incidence of transferable skills and perhaps even age discrimination (Dubé, 2004). Due to their skills and experience, older people may also be more selective about employment, therefore increasing their

length of unemployment (Dubé, 2004). Older workers are also more likely to voluntarily withdraw from the labour force entirely through early retirement.

### 3. Long-term unemployed, Proportion of unemployed - 2004

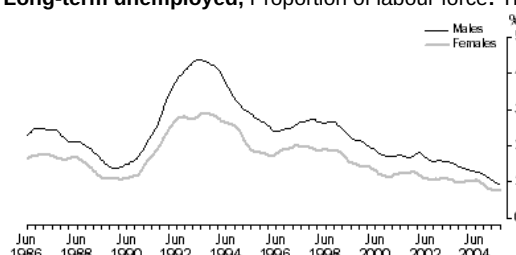


Note: Data based on annual average.  
Sources: Labour Force Survey.

## SEX

Men have higher rates of long-term unemployment than women. The differences in long-term unemployment for men and women are displayed in graph 4.

### 4. Long-term unemployed, Proportion of labour force: Trend



Sources: Labour Force, Australia - Detailed Delivery (cat. no. 6291.0.55.001)  
Labour Force, Australia, Spreadsheets (cat. no. 6202.0.55.001).

In September 2005, men represented 59% of long-term unemployed people and women represented 41%. In March 1993 the difference was greater, with men representing 69% of long-term unemployed people and women 31%.

## EDUCATION

Structural adjustments in the economy, due to changes in technology and the reorganisation of workplaces, may lead to fewer work opportunities for people possessing limited qualifications. Employment prospects are influenced by a person's level of educational attainment, and unemployment rates tend to fall for both men and women as the levels of qualifications increase (Crooks et al, 1996). As shown in table 5, those with a highest level of attainment of Year 10 or below represented almost half (47%) of all long-term unemployed people. In comparison, those with the same level of attainment represented only 20% of all employed people.

### 5. LONG-TERM UNEMPLOYED AND EMPLOYED, Level of highest educational attainment(a) - 2004

Educational attainment	Males '000	Females '000	Persons '000	Proportion of all long-term unemployed %	Proportion of all employed persons %
Bachelor Degree or above	5.8	2.2	8.0	7.1	20.8
Advanced Diploma/Diploma	2.5	2.4	4.9	4.3	7.8
Certificate III/IV	9.8	3.8	13.5	11.9	16.9
Certificate I/II(b)	2.1	2.1	4.2	3.7	1.3
Year 12	7.8	9.4	17.2	15.2	24.8
Year 11	6.6	5.0	11.6	10.2	7.6
Year 10 and below	33.0	19.8	52.8	46.7	20.1
Total(c)	68.0	45.2	113.2	100.0	100.0

(a) See endnote.2 (end note 2)

(b) Includes the category: certificate not further defined.

(c) Includes the categories: other education, level not determined and no educational attainment.  
Job Search Experience, Australia, July 2004 (cat. no. 6222.0).

## REFERENCES

Australian Bureau of Statistics 1994, Australia's long-term unemployed: A statistical profile (cat. no. 6255.0), Canberra.

Australian Bureau of Statistics 2000, 'Long-term unemployment', Australian Social Trends (cat. no. 4102.0), pp. 120-124, Canberra.

Crooks, ML, Webb, M, Forster, J & Williamson, J 1996, The Price We Pay: Young people, poverty and long-term unemployment in Australia, National Youth Affairs Research Scheme, Hobart.



Davidson, P 2002, The Obligation is Mutual: New Directions for Employment Assistance in Australia, ACOSS Paper 120, Australian Council of Social Service, Sydney.

Department of Treasury and Finance 2005, Long-Term Unemployment in Tasmania: A Statistical Analysis, Research Paper, June 2005, Economic Research Unit, Economic Policy Branch, Tasmania.

Dubé, V 2004, 'Sidelined in the labour market', Perspectives on labour and income, Summer 2004, Vol 16, No 2, pp. 25-31, Statistics Canada.

Furlong, A & Kelly, P 2005, 'The Brazilianisation of Youth Transitions in Australia and the UK?', Australian Journal of Social Issues, Winter 2005, Vol 40, No 2, pp. 207-225, Australian Council of Social Service, Sydney.

Ross, R 2002, 'Unemployment: A Multidimensional Problem', The Drawing Board: An Australian Review of Public Affairs, December 2002, School of Economics and Political Science, The University of Sydney.

## END NOTES

1. The Duration of Unemployment calculation changed in April 2001 from 'period of time since an unemployed person last worked full-time for two weeks or more' to the definition outlined in the introduction. < [Back](#)

2. Level of Highest Educational Attainment can be derived from information on Highest Year of School Completed and Level of Highest Non-school Qualification. The derivation process determines which of the 'non-school' or 'school' attainments will be regarded as the highest. Usually the higher ranking attainment will be self-evident, but in some cases some Secondary Education, such as Year 12, is regarded, for the purposes of obtaining a single measure, as higher than some Certificate level attainments. For further information regarding Level of Highest Educational Attainment refer to **Education and Work, Australia, May 2005** (cat. no. 6227.0) Explanatory Notes paragraphs 24 to 26. < [Back](#)

# The relationship between GDP and employment (Feature Article)

## THE RELATIONSHIP BETWEEN GDP AND EMPLOYMENT

### INTRODUCTION

Over the past two years there has been significant interest in the relationship between movements in economic activity represented by GDP growth and movements in the labour market represented by employment growth. In particular, commentators were interested in the ongoing strength in the labour market relative to the weaker movements in GDP.

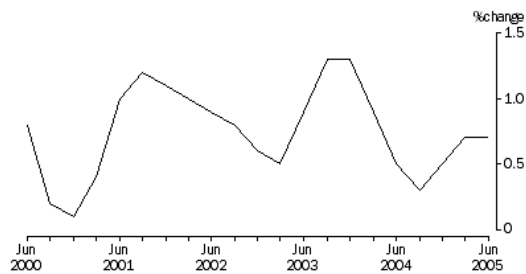
This article is a condensed version of the article published in the June quarter 2005 issue of **Australian National Accounts: National Income, Expenditure and Product** (cat. no. 5206.0). It describes the relationship between GDP and employment with a particular focus on the way in which movements in time series are analysed and the historical relationship between the variables. Some thoughts as to the nature of the relationship between the two series are also provided, although no definitive explanation of the pattern observed over the past two years is given.

### THE ANALYSIS OF TIME SERIES

Estimates of GDP indicate that the growth rate of the economy slowed in the period December 2003 to March 2005, while estimates from the Labour Force Survey shows the labour market grew strongly over the same period. In order to understand the relationship between these series it is important to consider measures of the trends in the series rather than focus on individual quarter on quarter movements. A turning point in the growth rate for the trend series will give an idea as to the underlying direction of the series. The focus in this article is on short term turning points in growth rates rather than longer term business cycle analysis.

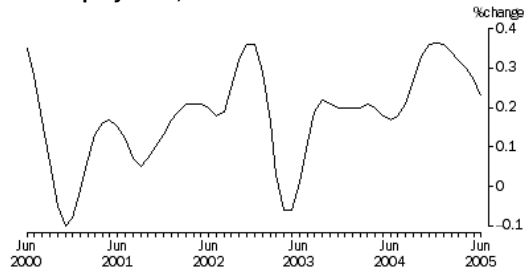
The ABS compiles trend estimates using a moving average of seasonally adjusted estimates with Henderson weights. It has been demonstrated that the trend series derived by the ABS is a good estimate of the short term trend movements for any particular series. The method used has the strong advantage of identifying the correct location of turning points. For aggregate series such as GDP and total employment, the turning points are stable over time in that they do not tend to move on the basis of additional information. Graphs 1 and 2 show the trend movements in GDP and employment up to June 2005. They show a peak in GDP growth in December quarter 2003 and a peak in employment growth in December quarter 2004.

#### 1. GDP, Volume measure - Quarter on quarter trend movements



Source: Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0).

## 2. Employment, Month on month trend movements



Source: Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0).

There are a range of other methods by which analysts examine time series. A common method, but not one supported by the ABS, is to derive a time series of seasonally adjusted growth rates in 'through the year' terms. This series is estimated by dividing the current quarter seasonally adjusted estimate by the corresponding estimate from the same quarter of the previous year.

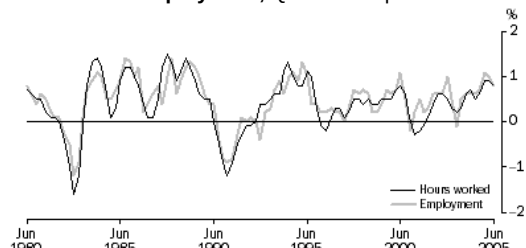
The implied turning points using this method are noticeably later than those estimated using trend estimates. Indeed, it can be shown that the identification of turning points in growth rates using 'through the year' methods will be roughly two quarters after the turning point defined using trend methods such as the Henderson method used by the ABS. The fact that the 'through the year' seasonally adjusted growth in employment had not turned in June 2005 may be one reason for the concern that the employment and GDP estimates appear to be telling different stories about the economy. From our trend analysis, both series have had turning points in their growth rates in the last two years and show a typical lagged relationship between employment growth and GDP growth. The historical nature of this relationship is examined in the next section.

## HISTORICAL RELATIONSHIP

The most recent lag between employment and GDP growth turning points of four quarters in the given period is not unusual in an historical context. Work by the ABS in 2004 (**Australian Economic Indicators**, April 2004) showed that the strongest correlation between GDP and employment growth occurred after three quarters, followed closely by lags of two quarters and four quarters. Based on the latest analysis, the strongest correlation between GDP and employment growth occurred after two quarters, but with strong correlations, also evident after three and four quarters. This work and other analysis suggest that while the nature of the relationship between the two variables changed over time, both in terms of length of the lag and the strength of the correlation, a lag of four quarters, as seen in the most recent cycle, was not a particularly unusual outcome.

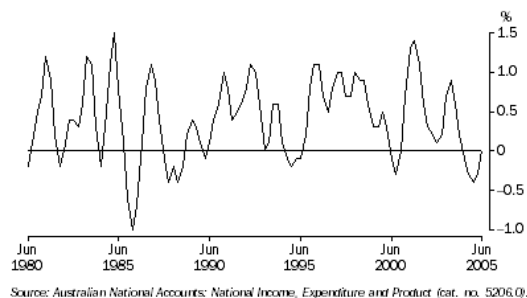
A further understanding of the nature of the historical relationship between GDP and employment can be obtained by examining the historical pattern of growth in GDP per hour worked - 'labour productivity'. Graph 3 shows that growth in hours worked and growth in employment are closely correlated. Given this close relationship, it is likely that, during the lags between peaks in GDP growth and employment growth, negative labour productivity growth will occur. Graph 4 and table 5 show recent cycles when negative labour productivity growth was evident. The run of four negative quarters is not unusual and the average size of the negative movement is only slightly larger than other recent runs of negative labour productivity growth.

## 3. Hours worked and employment, Quarter on quarter trend movements



Source: Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0)  
Labour Force, Australia (cat. no. 6202.0).

## 4. GDP per hour worked, Quarter on quarter trend movements



## 5. Labour productivity

Periods of negative labour productivity	Number of negative quarters	Average percentage change		
		GDP per hour worked	GDP	Hours worked
Jun 04 to Mar 05	4	-0.3	0.5	0.7
Jun 00 to Dec 00	3	-0.1	0.4	0.5
Sep 94 to Jun 95	4	-0.1	0.8	0.9
Dec 87 to Dec 88	5	-0.3	1.0	1.2
Dec 85 to Jun 86	3	-0.8	0.2	1.0

Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0).

## POSSIBLE ECONOMIC EXPLANATIONS

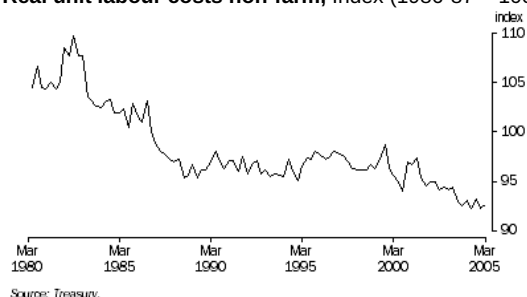
The existence of a lag between GDP and employment growth can be explained in broad terms. Initially, when a firm looks to increase production it is likely to do so by making more use of its current employees. It is only when it is clear that the increase in production will continue that extra employees will be taken on. This lag reflects costs of training, incorporating new employees into a firm and the time it takes to employ extra people. The reverse is also true when a fall in production occurs. It is only when such a fall is considered more permanent that shedding of labour would occur. While this broad explanation provides a starting point there are many factors that may affect the length and depth of the relationship at any particular point in time. The following section highlights several factors that are considered to be influencing the most recent cycle.

The first factor considered is the impact of the terms of trade. The growth in the terms of trade (measured as the growth in export prices relative to import prices) over the past two years has been very strong. The current rates of growth have only been matched in the 1970s. One impact of an increase in the terms of trade is to give greater purchasing power to Australian producers. While GDP does not take this change in purchasing power into account, a measure of GDP adjusted for the terms of trade effect, Real Gross Domestic Income (RGDI), can be compiled. Since March 2004 RGDI has been greater than GDP reflecting the recent growth in the terms of trade.

Preliminary modelling work by the ABS suggests that a distinct positive impact can be seen between an improvement in the terms of trade and improvements in GDP and employment, with the impact on employment being stronger. Further, although the terms of trade effect has only had a significant impact at certain times over the last 25 years, analysis suggests that there is a persistent impact from the terms of trade over the full time series.

The other factor considered is the impact of real unit labour costs. Graph 6 shows an index of real unit labour costs over the past 25 years. After a strong fall during the 1980s real unit labour costs growth was flat through the 1990s. Since 2001 real unit labour costs have declined steadily with some flattening in the trend in the last 12 months. One explanation of the nature of the lag between GDP and employment growth in the most recent cycle of the period is that relatively low growth in real unit labour costs has allowed employers to continue to hire staff even though growth in output volumes has declined. Only during the run of negative labour productivity growth in 1987-88 was the growth in real unit labour costs lower than during the most recent cycle.

6. Real unit labour costs non-farm, Index (1986-87 = 100.0)



Preliminary modelling work shows a distinct negative relationship between movements in labour costs and growth in employment and GDP with the impact on employment again being stronger. There seems reasonable support for the notion that relatively low real unit labour costs helped to maintain employment growth following the peak in GDP growth in December quarter 2003.

There are a range of other explanations that might help in understanding the relationship between GDP and employment. The nature of the labour market, including the skills sets of recently employed people, the low levels of unemployment and concern over skills shortages, may be one contributing factor. It may also be that when peaks and troughs in trend GDP are relatively moderate, as had been the case in the

most recent period, then the strength of the relationship between changes in GDP and changes in employment may be reduced.

Overall, this high level analysis supports the explanation that the combination of strong terms of trade growth and relatively small growth in real unit labour costs during the relevant cycle means that employment would grow relatively strongly compared to GDP. Further analysis and modelling of data is underway to expand our understanding of the issues. An article containing the results of this additional work will be released in the coming months.

## POSSIBLE REVISIONS TO GDP

The possibility of revisions to GDP growth rates has led some commentators to conclude that the observed lag between GDP and employment growth would be reduced over time as the GDP estimates are revised. While it is quite likely that GDP would be revised, and indeed revisions to the quarters in the cycle have already been published, the extent of revision required to fundamentally affect the currently published relationship between GDP and employment growth rates would be extreme. A more general revisions analysis is underway, but based on past studies the average revision to seasonally adjusted quarterly movements in GDP is less than 0.1 percentage points. The revision to trend movements is even smaller. Revisions of this magnitude to recent quarters would not be sufficient to move the location of the turning point in GDP growth rates in December quarter 2003.

## CONCLUSION

The relationship between GDP and employment can be affected by many factors. As a starting point for analysis it is important to understand the underlying behaviour of the data. The use of Henderson trends as compiled by the ABS is a more appropriate method of understanding these behaviours and turning points than analysing seasonally adjusted data in 'through the year' terms.

The analysis concludes that the latest turning points in GDP and employment growth rates for the period December 2003 to March 2005 can be defined, with the lag being four quarters. This is a slightly longer lag than on average but it is well within reasonable bounds. Two particular factors, strong growth in the terms of trade and relatively weak growth in real unit labour costs, seem to be contributing to the slightly longer than average lag but further analysis of the impact of these and other factors is required.

## FURTHER INFORMATION

For further information on the analytical, statistical and technical issues discussed in this article please refer to the original article, published in **Australian National Accounts: National Income, Expenditure and Product** (cat. no. 5206.0), available at: <<https://www.abs.gov.au>> (AusStats).

## REFERENCES

Australian Bureau of Statistics (April 1991), **Picking Turning Points in the Economy, Australian Economic Indicators** (cat. no. 1350.0), Canberra.

Australian Bureau of Statistics (August 2003), **A Guide to Interpreting Time Series - Monitoring Trends** (cat. no. 1349.0), Canberra.

Australian Bureau of Statistics (April 2004), **Leading Indicators of Employment, Australian Economic Indicators** (cat. no. 1350.0), Canberra.

Australian Bureau of Statistics (June 2005), **Australian National Accounts: National Income, Expenditure and Product** (cat. no. 5206.0), Canberra.

# Labour Outcomes of Migrants (Feature Article)

## LABOUR OUTCOMES OF MIGRANTS

### INTRODUCTION

Migration is necessary for Australia's future population growth. While natural increase (the excess of births over deaths) was the main source of population growth through most of the 20th century, net overseas migration now contributes about half of Australia's population growth. **(end note 1)** With fertility at below replacement level, net overseas migration is expected to become Australia's main source of population growth during the 21st century.

This article presents data from the Labour Force Status and Other Characteristics of Migrants survey, which was conducted as a supplement to the Labour Force Survey in November 2004. For this survey, data were collected for people who were born overseas, arrived in Australia after 1984, were aged 15 years or over on arrival, and had obtained permanent resident status prior to, or after, their arrival. The article examines various characteristics of these migrants, including their proficiency in English and educational qualifications, and looks at how these relate to their labour force outcomes in Australia.

It should be noted that the focus of the Labour Force Status and Other Characteristics of Migrants survey is on labour-related information about migrants, such as their employment, unemployment and participation rates. The survey is not designed to provide good estimates of

the number of people arriving on different visa types. The Department of Immigration and Multicultural and Indigenous Affairs is a better source of information on the numbers of people arriving under each stream.

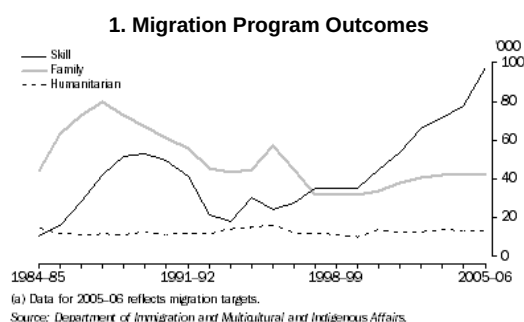
## MIGRANT PROGRAMS

Planned permanent immigration to Australia is administered through the Migration Program and the Humanitarian Program. These two programs regulate the flow of people seeking permanent residence in Australia. While New Zealand citizens may apply for permanent residency through either of these two programs, the 1973 Trans-Tasman Travel Arrangement allows them to enter Australia to visit, live and work without seeking a visa. In the main, they need only apply for permanent residency in Australia if they wish to access certain social security payments, obtain Australian Citizenship, or sponsor non-New Zealander family members for permanent residency.

The Migration Program has two main streams: a Skill Stream and a Family Stream. Information from the Department of Immigration and Multicultural and Indigenous Affairs indicates that the Migration Program for 2005-06 will be in the range of 130,000 to 140,000 people, of which 97,500 are expected to be under the Skill Stream. The Skill Stream is specifically designed to target migrants who have skills or outstanding abilities that will contribute to the Australian economy. Migrants who come to Australia under the Skill Stream generally have previous work experience, non-school educational qualifications and are proficient in English. The 2005-06 intake will be the largest ever under the Skill Stream and will account for approximately 70% of migrants to Australia in 2005-06. Family Stream entrants are selected on the basis of their family relationship with their Australian sponsor. These people are not subject to tests for skills or English proficiency.

The Humanitarian Program is designed to ensure visas are granted to those with strong humanitarian claims and in compelling need of resettlement. They are not selected on the basis of attributes (e.g. English proficiency and educational qualifications) that prepare them to become fully engaged in the Australian labour market in the short term. In addition they may not have social and family support networks in Australia. Humanitarian entrants often need government assistance to rebuild their lives in Australia and to become self-sufficient and fully participating members of the community. Care needs to be taken when comparing their settlement experiences with those of other migrants especially in terms of labour market outcomes.

As shown in graph 1, there has been a significant shift in the focus of the Migration Program over the last ten years. Of particular interest is the increasing intake of Skill Stream migrants since 1997-98. By comparison, the number of Family Stream migrants has remained relatively stable during this period. This reflects the need for skilled labour in Australia. The number of humanitarian entrants has remained relatively constant over the last 20 years.



While this article (using estimates from the Labour Force Status and Other Characteristics of Migrants survey) provides a general overview of migrants who arrived in Australia after 1984 (an estimated 1.4 million migrants), it focuses largely on those migrants who arrived in Australia between 1999 and 2004 (an estimated 422,000 migrants). As shown in graph 1, this is the period in which the number of Skill Stream migrants surpassed the intake of Family Stream migrants by increasingly large numbers. With the shift in focus of the Migration Program, it is likely that characteristics such as English proficiency and educational attainment of the recently arrived migrants would be very different to those of earlier arrivals. Skill Stream migration eligibility is assessed through recognition of particular skills. Some of these skills, such as proficiency in spoken English, are examined in this article in the context of labour force outcomes.

## OVERVIEW

In November 2004, the civilian population of Australia (aged 15 years and over) was 15.7 million people. Almost three-quarters (72% or 11.4 million people) of this population was born in Australia (see table 2). Migrants, as defined in this survey, accounted for 9% (1.4 million people) and just over half of them were women (54% or 737,000). The 422,000 migrants who arrived between 1999 and 2004 made up 31% of all migrants.

### 2. Overview

	Males '000	Females '000	Persons '000
Civilian population aged 15 years and over	7 749.5	7 995.7	15 745.2
Australia born	5 598.5	5 804.1	11 402.6
Other overseas born(a)	1 525.7	1 454.2	2 980.0
Migrants(b)	625.3	737.3	1 362.6
Arrived between 1999-2004	191.3	230.3	421.6

(a) People who arrived in Australia before 1985; people who arrived after 1984 and were aged less than 15 years on arrival; and people who arrived after 1984 and were aged 15 years and over on arrival and were either temporary residents who had planned to stay in Australia for 12 months or more, or those whose status was not able to be determined.

(b) People who were born overseas, who arrived in Australia after 1984, were aged 15 years and over on arrival, and had obtained permanent Australian resident status prior to or after their arrival.

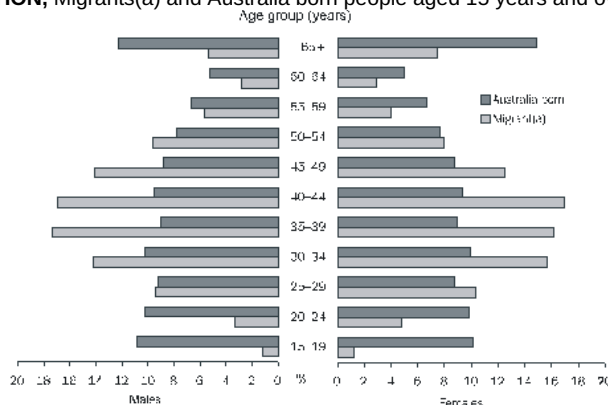
Labour Force Status and Other Characteristics of Migrants Survey.

## AGE AND SEX OF MIGRANTS

The Australian population is ageing due to declining fertility and increases in life expectancy. The proportion of people aged 65 and over is expected to more than double over the next few decades, with one quarter of Australians expected to be aged 65 years or more by 2044-45. **(end note 2)** An ageing population contributes to a reduction in labour supply growth, as labour participation rates fall significantly for those people aged over 55 years. Skill Stream applicants are generally required to be under 45 years of age at the time they apply to come to Australia. In addition, New Zealand citizens who come to Australia to live tend to be concentrated in the young adult age groups. These types of migration are particularly important for the labour market as they help to ensure growth in the working age portion of the Australian population.

As can be seen in graph 3, the migrants referred to in this article tended to be concentrated in the 25 to 54 years age groups in November 2004. There are two factors that contribute to this. The first is that the data presented in this article (with the exception of the data in graph 1) are from the Labour Force and Other Characteristics of Migrants survey. The fact that the survey is restricted to those who arrived after 1984 (aged 15 years or over on arrival) will limit the numbers in the older age groups. Graph 3 shows the age and sex structure of the people we are looking at in this article, but a population pyramid showing the total overseas born people would give a different picture. For example, there are more overseas born people in the 65+ age group than there are Australia born due to the large waves of post war migration. The second factor influencing the concentration of migrants in the 25 to 54 years age group is the age criterion that is used to select skilled migrants and the age of most spouses sponsored under the Family Stream.

### 3. AGE DISTRIBUTION, Migrants(a) and Australia born people aged 15 years and over - November 2004



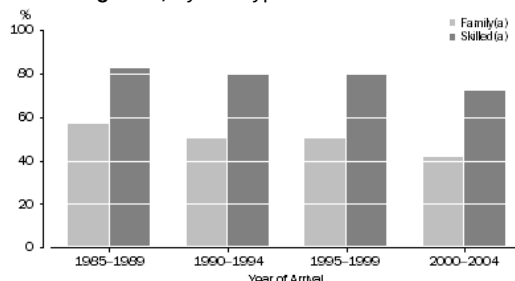
## LABOUR FORCE STATUS

The labour force participation rate of migrants who arrived between 1999 and 2004 was 71.4%. Of these 65% were employed (276,000 people), 29% were not in the labour force (121,000 people) and 6% were unemployed (25,000 people).

### Year of arrival

The longer migrants have lived in Australia, the more likely they are to be employed (see graph 4). For example, the employment to population ratio for skilled migrants who arrived between 1985 and 1989 (82%) was higher than for those who arrived between 2000 and 2004 (72%). **(end note 3)** Migrants who have been in Australia for longer periods are likely to have developed better knowledge of the labour market and better local contacts than recently arrived migrants. Principal applicant migrants in the Skill Stream already have a high level of English proficiency on arrival and other migrants are likely to have developed their English proficiency over time. They may also have obtained educational qualifications within Australia which helps them to gain employment.

### 4. Employment to Population ratio of Migrants, By visa type on most recent arrival to live in Australia - November 2004



## Country of birth

Of the 422,000 migrants who arrived in Australia between 1999 and 2004, 162,000 (38%) were born in a Main English Speaking Country (MESCC). **(end note 4)** There were 260,000 migrants (62%) who were born in countries where English is not the main language spoken. Most of these arrived on temporary visas (30%), **(end note 5)** under the Family Stream (27%) or the Skill Stream (19%). All of the humanitarian

entrants were born in countries where English is not the main language spoken.

Migrants born in Main English Speaking Countries had an unemployment rate of 4.5% at November 2004, which was lower than the unemployment rate of Australia born people (4.9%). New Zealand citizens who arrived after 1999 who were born in New Zealand or other Main English Speaking Countries also had an unemployment rate of 4.5% at November 2004. By comparison, the unemployment rate of migrants born in countries where English is not the main language spoken was 11.5%.

### Proficiency in English

It is a requirement that Skill Stream principal applicants are proficient in English. About 92% of migrants from Non-Main English Speaking Countries (NMEC) who arrived in Australia under the Skill Stream between 1999 and 2004 reported that they could speak English well or very well, or that only English was mainly spoken at home. There is no requirement for migrants who arrived under the Family Stream or the Humanitarian Program to be proficient in English. Over two-thirds (69%) of migrants who arrived under the Family Stream, and 43% of those who arrived as part of the Humanitarian Program, reported that they could speak English well or very well, or that only English was mainly spoken at home, in November 2004.

Migrants who speak English well or very well, or who mainly speak English at home, were much more likely to participate in the labour force (78%) than those with poorer English skills (who had a labour force participation rate of 35%).

## OCCUPATION AND INDUSTRY

There were about 285,000 migrants who arrived between 1999 and 2004 who had been employed in the country they lived in prior to migrating to Australia. Of these, 216,000 were employed at the time of the survey in November 2004 and close to one in five (19%) were no longer in the labour force. Of the 137,000 migrants who did not have a job just prior to migrating to Australia, 44% were employed at November 2004.

For the purposes of this article, occupation groups have been grouped into three broad categories: 'highly skilled' (comprising Managers and administrators, Professionals, Associate professionals, Tradespersons and related workers and Advanced clerical and service workers), 'intermediate skilled' (Intermediate clerical, sales and service workers and Intermediate production and transport workers) and 'elementary skilled' (Elementary clerical, sales and service workers and Labourers and related workers). (end note 6)

Of the 216,000 migrants who arrived between 1999 and 2004 and who were employed at November 2004 and employed before arrival, 151,000 had been in highly skilled occupations just before arriving in Australia, and most of these were in highly skilled occupations at November 2004. In November 2004, 74% (112,000) of these migrants were employed in highly skilled occupations, 13% (19,000) were in intermediate skilled occupations and 13% (20,000) had moved to elementary skilled occupations. There were 47,000 migrants who had been working in intermediate skilled occupations before migrating to Australia, and 51% (24,000) of these were in intermediate skilled occupations at November 2004, while 32% (15,000) had moved to highly skilled occupations and 17% (8,000) had moved to elementary skilled occupations. Of the 19,000 migrants who were in elementary skilled occupations before arriving in Australia, 39% (7,000) continued to be in elementary skilled occupations at November 2004 while another 39% were employed in highly skilled occupations.

### 5. Occupation before arrival compared to current occupation, Migrants who arrived between - 1999-2004(a)

Current occupation		Highly skilled(b)	Occupation just before arrival Intermediate skilled(c)	Elementary skilled(d)
Highly skilled(b)	(%)	74.1	31.8	38.8
Intermediate skilled(c)	(%)	12.9	50.9	*21.8
Elementary skilled(d)	(%)	13.0	17.3	39.3
Total	(%)	100.0	100.0	100.0
Total	('000)	150.7	47.1	18.5

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Who were employed before arrival and employed at November 2004.

(b) Comprises Managers and administrators, Professionals, Associate professionals, Tradespersons and related workers and Advanced clerical and service workers.

(c) Comprises Intermediate clerical, sales and service workers and Intermediate production and transport workers.

(d) Comprises Elementary clerical, sales and service workers and Labourers and related workers.

Labour Force Status and Other Characteristics of Migrants Survey.

The selection criteria for potential Skill Stream applicants recognises a range of skill related factors. Applicants receive additional points if their occupation is listed on the Migration Occupations in Demand List. This list is modified from time to time in an effort to allow Australian employers to meet labour market shortages in particular areas. The migration occupation groups which the Australian Government has identified as being in demand over the last few years are Professionals (particularly health professionals), Associate professionals (chefs is the only occupation currently listed as being in demand in this occupation group) and Tradespersons and related workers.

Professionals, Intermediate clerical, sales and service workers, and Tradespersons and related workers were the three most common occupation groups for both migrants and for Australia born people at November 2004 (see graph 6). The proportions employed in these three occupation groups were similar for both migrants and Australia born, with the exception of Professionals. About 26% of migrants were Professionals at November 2004, compared to about 18% of Australia born people. Migrants from the Main English Speaking Countries were the most likely to be Professionals. Migrants from Non-Main English Speaking Countries were more likely than other migrants or Australia born people to be in the occupations of Labourers and related workers, Elementary clerical, sales and service workers or Intermediate clerical, sales and service workers.

### 6. Occupations of Migrants who arrived from 1999 to 2004 compared to Australia Born People - November 2004



Source: Labour Force Status and Other Characteristics of Migrants Survey.

Of those migrants who were employed at November 2004 and had arrived since January 1999, 17% were employed in the Property and business services industry, 14% in Manufacturing, and 11% in both Retail trade and Health and community services. The industries in which the largest proportions of Australia born people were found were the same although the ordering was different. In November 2004, 16% of Australia born people worked in the Retail trade industry, followed by 11% in Property and business services and 10% in both Manufacturing and Health and Community Services.

There were about 16,000 migrants who had arrived between 1999 and 2004 and who had a job just before arrival, but were unemployed in November 2004. Conversely, there were almost 60,000 migrants who did not have a job just before arrival in Australia but were employed in November 2004.

## SOURCE OF INCOME

Almost 70% of migrants who arrived under the Skill Stream between 1999 and 2004 derived their main source of income from wages or salary, compared to 37% of Family Stream migrants (see table 7). Wages or salary was the main source of income for about 30% of humanitarian entrants, most of whom were reliant on government pension or benefits (57%) for their main source of income.

The survey covers only those migrants who had obtained permanent resident status prior to, or after, their arrival. At November 2004, 7% of migrants who had arrived most recently on a temporary visa, but who had since obtained permanent resident status, cited government pensions and benefits as their main source of income. Entrants to Australia do not generally have access to social welfare or health care benefits while on a temporary visa.

## 7. MIGRANTS WHO ARRIVED FROM 1999 TO 2004, Main source of income by type of visa on most recent arrival to live in Australia

	Wages or salary %	Government pension or benefit %	Other income %	Nil/Spouses income %	Total %
New Zealand citizen	72.2	8.3	7.6	11.9	100.0
Temporary visa	62.1	7.8	16.1	14.0	100.0
Permanent visa	48.7	15.3	12.1	23.9	100.0
Skilled	67.4	*5.2	15.0	12.4	100.0
Family	36.8	17.8	10.2	35.2	100.0
Humanitarian(a)	*29.9	57.2	* -	*12.9	100.0
Other	*42.4	*12.6	*23.3	*21.7	100.0
Status not determined	48.3	*18.5	22.2	*11.0	100.0
<b>Total</b>	<b>57.7</b>	<b>11.8</b>	<b>12.7</b>	<b>17.7</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

- nil or rounded to zero (including null cells)

(a) Includes 'Refugee'.

Labour Force Status and Other Characteristics of Migrants Survey.

## EDUCATIONAL QUALIFICATIONS

Of the 422,000 migrants, including New Zealand citizens, who arrived in Australia after 1999, 237,000 (56%) had obtained a non-school qualification before arrival (see table 8). Of these, 112,000 (47%) had a Bachelor Degree, 54,000 (23%) had a Certificate and 30,000 (13%) had an Advanced Diploma or Diploma.

There were 187,000 migrants in the labour force (i.e. either employed or unemployed) in November 2004 who arrived from 1999 to 2004 and had a non-school qualification before arriving in Australia. Of these, 100,000 (53%) were employed as Managers and administrators, Professionals, or Associate professionals. An additional 24,000 (13%) were employed as Intermediate clerical, sales and service workers, and 19,000 (10%) as Tradespersons and related workers.

## 8. MIGRANTS WHO ARRIVED FROM 1999 TO 2004, Occupation by highest non-school educational attainment before arrival

	With a non-school qualification(a) '000	Without a non-school qualification(b) '000	Total '000
Employed as at November 2004	172.8	103.0	275.8
Managers and administrators	16.4	*2.0	18.4
Professionals	64.4	8.5	72.9
Associate professionals	19.1	7.6	26.7
Tradespersons and related workers	18.9	12.2	31.1
Advanced clerical and service workers	*3.6	5.5	9.1
Intermediate clerical, sales and service workers	24.4	24.7	49.1
Intermediate production and transport workers	5.2	10.7	15.9
Elementary clerical, sales and service workers	12.1	14.4	26.5



Labourers and related workers	8.6	17.4	26.0
Unemployed	14.7	10.4	25.1
Not in the Labour Force	49.8	70.9	120.7
Total	237.3	184.3	421.6

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Includes 'Level not determined'.

(b) Includes those who were 'Still at school'.

Labour Force Status and Other Characteristics of Migrants Survey.

The unemployment rate of migrants who arrived with a non-school qualification was 7.8% in November 2004, compared to 9.2% for migrants who arrived without a non-school qualification.

Of the 237,000 migrants who had a non-school educational qualification before arriving in Australia, 97,000 (41%) said their qualification was not recognised in Australia. This group of migrants had an unemployment rate of 12.3% in November 2004, compared to 5.6% for migrants whose educational qualifications were recognised in Australia. Migrants who had their non-school education qualification recognised were more likely to either remain in the labour force or to gain employment. Of the 121,000 migrants with recognised non-school qualifications who had a job prior to arrival in Australia, 9% were not in the labour force at November 2004 compared to 29% (22,000 people) whose qualifications were not recognised and had a job prior (75,000 people). About four-fifths (79%) of migrants with recognised non-school qualifications who did not have a job prior to arrival were employed at November 2004, compared to 27% of those without recognised non-school qualifications.

## FURTHER INFORMATION

For further information about the statistics on migrants in Australia, please contact Assistant Director on South Australia (08) 8237 7306.

For email enquiries, please contact Client Services on [client.services@abs.gov.au](mailto:client.services@abs.gov.au).

## END NOTES

1. Net overseas migration is the difference between the number of permanent (settler) and long-term arrivals and the number of permanent and long-term departures. < [Back](#)
2. Productivity Commission 2005, **Economic Implications of an Ageing Australia**, Research Report, Canberra. < [Back](#)
3. The employment to population ratio for any group within the population is the number of employed people of that group, expressed as a percentage of the total population (aged 15 years and over) in that group. < [Back](#)
4. Main English Speaking Countries comprises the United Kingdom, Ireland, New Zealand, Canada, United States of America and South Africa. < [Back](#)
5. A temporary visa is the permission or authority granted by Australia for foreign nationals to travel to Australia and stay up to a specified period of time. Temporary entrants include students and business people. < [Back](#)
6. See the **Australian Standard Classification of Occupations, Second Edition** (cat. no. 1220.0) for information about the skill levels required for different occupations. < [Back](#)

# Explanatory Notes

## Explanatory Notes

### EXPLANATORY NOTES

#### INTRODUCTION

**1 Australian Labour Market Statistics** brings together a range of ABS labour statistics to present a statistical summary of the Australian labour market. It has been developed primarily as a reference document, and provides a broad basis for labour analysis and research.

**2** In addition to data from the Labour Force Survey (LFS), this publication contains statistics from a range of other ABS labour surveys including Average Weekly Earnings, the Labour Price Index, Job Vacancies, Employment and Earnings - Public Sector, and Industrial Disputes. The publication also includes summary data from recently released labour force supplementary surveys.

**3** This publication includes international data for selected labour market indicators.

## LABOUR STATISTICS CONCEPTS, SOURCES AND METHODS

4 The concepts and definitions underpinning ABS labour statistics align closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts of Australia's labour market statistics, and the sources and methods used in compiling the estimates, are presented in **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), which is available on the ABS web site at <<https://www.abs.gov.au>> [Themes - People - Labour - **Labour Statistics: Concepts, Sources and Methods**].

5 For an explanation of terms used in this publication, refer to the Glossary.

## LABOUR STATISTICS THEME PAGE

6 The Labour Statistics theme page is a portal to all labour statistics and related information residing on the ABS web site. The page contains hyperlinks to **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001); information about labour related surveys; and a help page for respondents to ABS labour related surveys. The Labour Theme Page can be accessed at <<https://www.abs.gov.au>> [Themes - People - Labour].

## TREND ESTIMATES

7 Series in this publication include **original** and **trend** series. Special care should be taken in interpreting data for the most recent months and quarters, as some of the original and all of the trend series are subject to revision.

8 It is not uncommon for movements in original time series data and those provided from trend series to differ. Movements in a time series of original data may reflect several factors, including:

- longer-term changes in the item being measured (i.e. trend movements)
- short-term irregular changes
- regular seasonal influences
- normal 'trading', 'working' or 'pay' day patterns
- systematic holiday effects.

9 Trend estimates help the user to identify the underlying magnitude and direction of a time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only trend and short-term irregular movements. Trend estimates are then obtained by removing the effects of the short-term irregularities, which in some series can be a major contributor to movements in the original data.

10 Trend estimates are produced by smoothing the seasonally adjusted series using a statistical procedure based on Henderson moving averages. At each time point in a series, a trend estimate is calculated using a centred x-term Henderson moving average of the seasonally adjusted series. The moving averages are centred on the point in time at which the trend is being estimated. The number of terms used to calculate the trend varies across surveys. Generally, ABS monthly surveys use a 13-term moving average and quarterly surveys use a 7-term moving average.

11 Estimates for the most recent time points cannot be calculated using the centred average method as there are insufficient data to do so. Instead, alternative approaches that approximate the smoothing properties of the Henderson moving average are used. This can lead to revision in the trend estimates for the most recent time periods until sufficient data are available to calculate the trend using the centred Henderson moving average. Revisions of trend estimates will also occur with revisions to the original data and re-estimation of seasonal adjustment factors.

12 Seasonal factors are reviewed at least annually for ABS labour series, to take account of additional original data. The results of the latest reviews were used to compile the trend estimates given in this publication. For further information about the most recent reviews of seasonal factors for the labour surveys, see the following publications:

- for labour force see **Labour Force, Australia** (cat. no. 6202.0)
- for labour price index see **Labour Price Index, Australia** (cat. no. 6345.0)
- for average weekly earnings see **Average Weekly Earnings, Australia** (cat. no. 6302.0)
- for public sector employees see **Wage and Salary Earners, Public Sector, Australia** (cat. no. 6248.0.55.001)
- for job vacancies see **Job Vacancies, Australia** (cat. no. 6354.0).

13 The general methods used in the ABS for estimating trends are described in **Information Paper: A Guide to Interpreting Time Series - Monitoring Trends** (cat. no. 1349.0).

## RELIABILITY OF ESTIMATES

14 Estimates in this publication are subject to two types of error:

- sampling error - errors that occur because the data were obtained from a sample rather than the entire population
- non-sampling error - errors that occur at any stage of a survey and can also occur in a census, e.g. incorrect responses to questions, processing errors, frame deficiencies.

**15** For more information on these sources of error, and on measures of these types of errors, including standard errors, refer to the main publications associated with each of the data series presented in this publication (see the relevant sections later in these Explanatory Notes). More information on standard errors applying to LFS estimates is contained in **Information Paper: Labour Force Survey Standard Errors** (cat. no. 6298.0).

## ROUNDING

**16** Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

## LABOUR FORCE SURVEY DATA

### Description of the survey

**17** Data in tables 1.1-1.7, 2.1-2.10, 3.1-3.3, 4.3 and 4.4 are obtained from the Labour Force Survey (LFS), which provides extensive information about the labour market on a monthly basis. The LFS is a component of the Monthly Population Survey (MPS), which includes the LFS and supplementary surveys.

### Monthly Population Survey

**18** The MPS is a population survey based on a multi-stage area sample of private dwellings (currently about 30,000 houses, flats, etc.), and list samples of discrete Indigenous communities and non-private dwellings (hospitals, hotels, motels, etc.), and covers about 0.5% of the population of Australia. The information is obtained from occupants of selected dwellings by interviewers, with the first interview conducted face-to-face and subsequent interviews over the telephone. Once selected, households are included for eight consecutive months before being replaced.

### Labour Force Survey

**19** The LFS has been conducted on a monthly basis since February 1978. Prior to that, from 1964 to 1978, a national survey was conducted quarterly. Telephone interviewing was introduced between August 1996 and February 1997. New questionnaires have been introduced periodically, most recently in April 2001.

**20** The LFS includes all usual residents of Australia aged 15 and over except:

- members of the permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts
- overseas residents in Australia
- members of non-Australian defence forces (and their dependants) stationed in Australia.

**21** From July 1993, Jervis Bay Territory has been excluded from the scope of the LFS.

### Supplementary surveys

**22** The supplementary surveys collect additional data on a different topic each month. Many topics covered are rotated on an annual or less frequent basis, while others are included once only. Results from each supplementary survey topic are released separately. A list of topics covered in recent years is in Appendix 3.

**23** Tables 4.1, 4.2 and 4.3 contain data from the annual supplementary surveys Underemployed Workers and Persons Not in the Labour Force. These tables are updated annually.

**24** The supplementary surveys include a subset of the persons included in the LFS (see paragraph 20). The additional exclusions for most supplementary surveys are:

- persons living in private dwellings in remote and sparsely settled parts of Australia
- institutionalised persons
- boarding school pupils.

### Reference period

**25** Interviews are generally conducted during the two weeks beginning on the Monday between the 6th and 12th of each month, with questions relating to the week prior to the interview (the reference week).

### Notes on data

**26** From time to time, changes to survey methodology affect the time series produced. Some examples of changes to this survey are: new questions added to the LFS questionnaire in April 2001; and the introduction of telephone interviewing in 1996-97.

**27** In February 2004 the definition of unemployed persons was changed to include all persons who were waiting to start work and were available to start in the reference week, with consequent revisions to data from April 2001 to January 2004. For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics** (cat. no. 6292.0).

## Population benchmarks

**28** LFS estimates of persons employed, unemployed and not in the labour force are calculated in such a way as to add up to independently estimated counts (benchmarks) of the civilian population aged 15 years and over. These benchmarks are based on census data adjusted for under-enumeration and updated for births, deaths, interstate migration, and net permanent and long-term migration. This procedure compensates for under-enumeration in the survey, and leads to more reliable estimates.

**29** From February 2004, labour force estimates have been compiled using benchmarks based on the results of the 2001 Census of Population and Housing. Revisions were made to historical estimates from January 1999 to January 2004. These revisions affect original, seasonally adjusted and trend estimates. The next revision is scheduled for February 2009 to take account of the results from the 2006 census.

## Families series

**30** Family relationship is not determined for all households and persons in scope of the LFS. This is due to a number of factors related to the scope and coverage of the LFS, as well as difficulties in determining family structure and characteristics. The survey questions used to determine family relationships are restricted to persons enumerated as usual residents of private dwellings. That is, the following persons are excluded:

- all persons enumerated in non-private dwellings (including hotels, motels, hospitals and other institutions)
- persons enumerated as visitors to (rather than usual residents of) private dwellings.

**31** In addition, in those households where it is not possible to obtain information relating to all the usual residents, no family information is recorded. Thus, persons living in households that include a member of the permanent defence forces, who is outside the scope of the LFS, are excluded from survey questions used to determine family relationships. This also applies to households that, at the time of the survey, had one or more of their usual residents away for more than six weeks, and households from which an incomplete or inadequate questionnaire was obtained for any usual resident in scope of the survey.

## Further information and data on the LFS

**32** LFS estimates are published monthly in **Labour Force, Australia** (cat. no. 6202.0). A series of time series spreadsheets are released at the same time as this publication under cat. no. 6202.0.55.001. More detailed estimates are released, in electronic format, one week later, under cat. no. 6291.0.55.001. All electronic data can be accessed via the ABS web site at <<https://www.abs.gov.au>>. Additional data are available on request.

**33** For further information about the range of LFS products and services, and the concepts and methodology used in the LFS, refer to **Information Paper: Changes to Labour Force Survey Products** (cat. no. 6297.0), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Assistant Director, Labour Force Survey on Canberra (02) 6252 6565.

## EMPLOYER SURVEY DATA

**34** Tables 2.11, 5.1-5.3, 6.1-6.2 and 7.1 of this publication contain data from ABS employer surveys.

### Scope of employer surveys

**35** Except where otherwise noted, the sample for ABS labour employer surveys is selected from the ABS Business Register, which is primarily based on registrations to the Australian Taxation Office's (ATO) Pay As You Go Withholding scheme. The population is updated quarterly to take account of new businesses, business that have ceased employing, changes in employment levels, changes in industry, and other general business changes. Businesses excluded from the scope of the employer surveys are:

- those primarily engaged in Agriculture, forestry and fishing (except for the Survey of Employment and Earnings)
- private households employing staff
- overseas embassies, consulates, etc.
- those located outside Australia.

## JOB VACANCIES DATA

**36** Table 7.1 contains data from the Job Vacancies Survey (JVS).

### Description of the survey

**37** The current Job Vacancies Survey has been conducted since November 1983 and is a quarterly sample survey of approximately 4,600 employers. The survey produces estimates of the number of job vacancies in Australia.

### Reference date

**38** The reference date for the survey is the third Friday of the middle month of the quarter.

### Notes on data

**39** Prior to the August quarter 1999, job vacancies statistics were collected as part of the Job Vacancies and Overtime Survey. The overtime

component of the survey ceased following the May quarter 1999.

#### Further information

**40** For further information about the range of products and services relating to ABS job vacancies statistics, and the concepts and methodology used, refer to **Job Vacancies, Australia** (cat. no. 6354.0), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), the associated time series spreadsheets available from the ABS web site, or contact the Manager, Job Vacancies Survey on Perth (08) 9360 5304.

### PUBLIC SECTOR EMPLOYEES DATA

#### Description of the survey

**41** Data in table 2.11 are obtained from a quarterly survey of public sector businesses: the Survey of Employment and Earnings - Public Sector (SEE). This survey has been conducted on a quarterly basis since the September quarter 1983. The survey measures both the number of public sector wage and salary earners employed in the middle month of each quarter and their total quarterly earnings.

#### Reference period

**42** The reference period for employees is the last pay period ending on or before the third Friday of the middle month of the quarter. The reference period for gross earnings is all pay periods which end within the quarter.

#### Notes on data

**43** The private sector component of the Survey of Employment and Earnings was discontinued after the December quarter 2001.

#### Further information

**44** For further information about the range of products and services relating to public service employees, and the concepts and methodology used, refer to **Wage and Salary Earners, Public Sector, Australia** (cat. no. 6248.0.55.001), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Manager, Survey of Employment and Earnings, Public Sector on Perth (08) 9360 3141.

### AVERAGE WEEKLY EARNINGS DATA

**45** Table 5.2 contains data from the Survey of Average Weekly Earnings (AWE).

#### Description of the survey

**46** The Survey of Average Weekly Earnings has been conducted quarterly since August 1981. Approximately 4,700 businesses contribute to the survey each quarter. The purpose of the survey is to measure average gross weekly earnings per employee job in Australia.

**47** Average weekly earnings statistics represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees. Changes in the averages may be affected not only by changes in the level of earnings of employees but also by changes in the overall composition of the wage and salary earner segment of the labour force.

#### Reference period

**48** The reference period for the survey is the last pay period ending on or before the third Friday of the middle month of the quarter. For non-weekly payrolls, businesses are asked to provide one week's portion.

#### Further information

**49** For further information about the range of products and services relating to average weekly earnings refer to **Average Weekly Earnings, Australia** (cat. no. 6302.0), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), the associated time series spreadsheets available from the ABS web site, or contact the Manager, Survey of Average Weekly Earnings on Perth (08) 9360 5304.

### WAGE PRICE INDEX DATA

**50** Table 5.1 contains data from the **Labour Price Index, Australia** (cat. no. 6345.0) publication.

#### Description of the survey

**51** The Labour Price Index measure changes in the price of labour services resulting from market pressures, and is unaffected by changes in the quality or quantity of work performed. i.e. it is unaffected by changes in the composition of the labour force, hours worked, or changes in characteristics of employees (e.g. work performance). Information about the wage price indexes has been released for each quarter since September 1997. Approximately 20,000 matched jobs from 4,800 businesses are priced each quarter.

## Reference period

**52** The reference period for the survey is the last pay period ending on or before the third Friday of the mid-month of the quarter.

## Further information

**53** For further information about the range of products and services relating to the Wage Price Index, and the concepts and methodology used, refer to **Labour Price Index, Australia** (cat. no. 6345.0), **Labour Price Index, Statistics Concepts, Sources and Methods** (cat. no. 6351.0.55.001), the associated time series spreadsheets available from the ABS web site, or contact the Assistant Manager on Perth (08) 9360 5151.

## INDUSTRIAL DISPUTES DATA

**54** Tables 6.1 and 6.2 contain data from the Industrial Disputes collection.

## Description of the survey

**55** The ABS has been collecting information about industrial disputes since 1913. The Industrial Disputes collection produces estimates of the number of industrial disputes (where ten or more working days are lost), employees involved, and working days lost.

**56** The scope of the Industrial Disputes collection is restricted to employing businesses at which an industrial dispute has occurred. For this collection, industrial disputes are defined as work stoppages of ten working days or more. Ten working days are equivalent to the amount of ordinary time worked by ten people in one day, regardless of the length of the stoppage, e.g. 3,000 workers on strike for two hours would be counted as 750 working days lost (assuming they work an eight-hour day).

**57** Effects on other establishments not directly involved in the dispute, such as stand-downs because of lack of materials, disruption of transport services, power cuts, etc. are not included in the scope of this collection.

## Reference period

**58** The collection reference period is the calendar quarter.

## Further information

**59** For further information about the range of products and services relating to ABS industrial disputes statistics, and the concepts and methodology used, refer to the electronic publication **Industrial Disputes, Australia** (cat. no. 6321.0.55.001) and the associated time series spreadsheets, available from the ABS web site, **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Manager, Industrial Disputes on Perth (08) 9360 5159.

## NATIONAL ACCOUNTS DATA

**60** Table 5.3 contains data from the Australian National Accounts.

**61** Estimates of compensation of employees are contained within the Income Accounts of the Australian National Accounts, which are published in **Australian System of National Accounts** (cat. no. 5204.0) and **Australian Economic Indicators** (cat. no. 1350.0). For further information on how estimates are obtained, see **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0).

## INTERNATIONAL DATA

**62** Table 1.8 contains data from the International Labour Organisation.

**63** Estimates of key indicators of the labour markets from various countries have been included for comparison with Australian estimates of labour force participation, employment, unemployment and unemployment rates.

# Glossary

## GLOSSARY

### Active steps to find work

Includes writing, telephoning or applying in person to an employer for work; answering an advertisement for a job; checking factory noticeboards or the touchscreens at Centrelink offices; being registered with Centrelink as a jobseeker; checking or registering with any other employment agency; advertising or tendering for work; and contacting friends or relatives.

### **Actual hours worked**

The hours actually worked during the reference week, not necessarily hours paid for.

### **Adult employees**

Adult employees are those employees 21 years of age or over and those employees who, although under 21 years of age, are paid at the full adult rate for their occupation.

### **Aggregate (actual) hours worked**

The total number of hours a group of employed persons has actually worked during the reference week, not necessarily hours paid for.

### **Attending full-time education**

Persons aged 15-24 years who were enrolled full-time at secondary school, high school, Technical and Further Education (TAFE) college, university, or other educational institution in the reference week.

### **Average compensation per employee**

**National Accounts.** The total compensation of employees divided by the number of employees.

### **Average earnings (National Accounts basis)**

See **average compensation per employee**.

### **Average hours worked**

Aggregate hours worked by a group divided by the number of persons in that group.

### **Average weekly earnings**

Average weekly earnings represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees. For information about scope exclusions applying to employer surveys, refer to paragraph 35 of the Explanatory Notes.

### **Civilian population aged 15 years and over**

All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

### **Commonwealth government employees**

Employees of all departments, agencies and authorities created by or reporting to the Commonwealth Parliament. Those bodies run jointly by the Commonwealth Government and state governments are classified to Commonwealth.

### **Compensation of employees**

**National Accounts.** The total remuneration, in cash or in kind, payable by enterprises to employees in return for work done by the employees during the accounting period. Compensation of employees comprises wages and salaries (in cash and in kind) and **employers' social contributions**. Compensation of employees is not payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees excludes any taxes payable by the employer on the wage and salary bill (e.g. payroll tax, fringe benefits tax). See **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0) for further information.

### **Contributing family worker**

A person who works without pay, in an economic enterprise operated by a relative.

## Country of birth

Classified according to the **Standard Australian Classification of Countries (SACC)** (cat. no. 1269.0).

## Couple families

A family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household.

## Dependants

All family members under 15 years, and all children aged 15-24 years attending full-time education (except those who have a partner or child of their own usually resident in the household).

## Dependent child

Any child in a family under 15 years of age or aged 15-24 years who is attending full-time education (except those who have a partner or child of their own usually resident in the household).

## Dependent student

A child who is 15-24 years of age, who is attending full-time education, and who has no partner or child of his or her own usually resident in the same household.

## Discouraged jobseekers

Persons with marginal attachment to the labour force who wanted to work and were available to start work within the next four weeks but whose main reason for not actively looking for work was that they believed they would not find a job for any of the following reasons:

- considered to be too young/too old by employers
- lacked necessary schooling, training, skills or experience
- difficulties because of language or ethnic background
- no jobs in their locality or line of work
- no jobs available at all.

## Duration of unemployment

Under the redesigned LFS questionnaire, implemented in April 2001, the definition of duration of unemployment is the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked in any job for two weeks or more, until the end of the reference week; whichever was the shorter period.

Prior to April 2001, duration of unemployment was defined in the LFS as the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked full-time for two weeks or more, until the end of the reference week; whichever was the shorter period.

## Employed

Employed persons include all persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers, who had a job, business or farm, but were not at work.

## Employed full-time

See **full-time employed**.

## Employed part-time



See **part-time employed**.

## **Employee**

**Labour Force Survey and other household surveys.** A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or a person who operates their own incorporated enterprise with or without hiring employees.

**Employer surveys.** Employees are wage and salary earners who received pay for any part of the reference period. For information about scope exclusions applying to employer surveys, refer to paragraph 35 of the Explanatory Notes.

## **Employee job**

**Wage Price Index.** A job for which the occupant receives remuneration in wages, salary, payment in kind, or piece rates. All employee jobs in all employing organisations (except those excluded from all ABS labour employer surveys) are in scope of the WPI, except the following:

- 'non-maintainable' jobs (i.e. jobs that are expected to be occupied for less than six months of a year)
- jobs for which wages and salaries are not determined by the Australian labour market (e.g. working proprietors of small incorporated enterprises, most employees of Community Development Employment Programs, jobs where the remuneration is set in a foreign country).

For information about scope exclusions applying to employer surveys, refer to paragraph 35 of the Explanatory Notes.

## **Employer**

**Labour Force Survey and other household surveys.** A person who operates their own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.

**Employer surveys.** A business with one or more employees.

## **Employers' social contributions**

**National Accounts.** Contributions by employers to pension and superannuation funds; and premiums paid by employers to workers' compensation schemes for occupational injuries and diseases.

## **Extended labour force underutilisation rate**

The unemployed, plus the underemployed, plus two groups of marginally attached to the labour force:

- (i) persons actively looking for work, not available to start work in the reference week, but available to start work within four weeks and
- (ii) discouraged jobseekers

as a percentage of the labour force augmented by (i) and (ii).

## **Family**

Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

## **Family reference person**

In families which are not couple families or one-parent families, as defined, the family reference person is the eldest person in the household.

## **Former workers**

Unemployed persons who have previously worked for two weeks or more but not in the last two years.

## **Full-time educational attendance**

Persons aged 15-19 who, during the reference week were enrolled full-time at secondary or high schools, and those aged 15-24 who, during the reference week, were enrolled full-time at a Technical and Further Education (TAFE) college, university, or other tertiary educational

institution.

### Full-time employed

**Household surveys.** Persons employed full-time are those employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

### Full-time employees

**Employer surveys.** Full-time employees are permanent, fixed term and casual employees who normally work the agreed or award hours for a full-time employee in their occupation and received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more per week.

### Gross domestic product (GDP)

**National Accounts.** The total market value of goods and services produced in Australia within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. Thus gross domestic product, as here defined, is at 'market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. See **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0) for further information.

### Gross mixed income (GMI)

**National Accounts.** The owners of unincorporated enterprises, or other members of their households, may work without receiving any wage or salary. Mixed income includes both **gross operating surplus** for the unincorporated enterprises and returns for the proprietors' own labour (akin to wages and salaries). See **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0) for further information.

### Gross operating surplus (GOS)

**National Accounts.** The amount of gross output remaining after subtracting costs incurred in producing that output, but before any deductions for consumption of fixed capital. See **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0) for further information.

### Household

A group of one or more persons in a private dwelling who consider themselves to be separate from other persons (if any) in the dwelling, and who make regular provision to take meals separately from other persons, i.e. at different times or in different rooms. Lodgers who receive accommodation but no meals are treated as separate households. Boarders who receive both accommodation and meals are not treated as separate households. A household may consist of any number of families and non-family members.

### Industrial dispute

An industrial dispute is defined as a state of disagreement over an issue or group of issues between an employer and its employees, which results in employees ceasing work. Industrial disputes comprise strikes, which are a withdrawal from work by a group of employees; and lockouts, which are a refusal by an employer or group of employers to permit some or all of their employees to work.

### Industry

An industry is a group of businesses or organisations that perform similar sets of activities in terms of the production of goods and services. Industry is classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993** (cat. no. 1292.0). The industry assigned to an employed person is the industry of the organisation in which the person's main job is located. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the industry of their most recent job.

### Job leavers

Unemployed persons who have worked for two weeks or more in the past two years and **left that job voluntarily** - that is, because (for example): of unsatisfactory work arrangements/pay/hours; the job was a holiday job or they left the job to return to studies; or their last job was running their own business and they closed down or sold that business for reasons other than financial difficulties.

### Job losers

Unemployed persons who have worked for two weeks or more in the past two years and **left that job involuntarily**: that is, they were laid off or retrenched from that job; left that job because of their own ill-health or injury; the job was seasonal or temporary; or their last job was running their own business and the business closed down because of financial difficulties.

## **Job vacancy**

A job vacancy is an employee job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, by factory notices, by notifying public or private employment agencies or trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are vacancies:

- for jobs which became vacant on the survey date and were filled that same day
- for jobs of less than one day's duration
- to be filled by persons already hired, or by promotion or transfer of existing employees
- to be filled by employees returning from paid or unpaid leave or after industrial dispute(s)
- not available for immediate filling on the survey reference date
- for work to be carried out by contractors
- for which no recruitment action has been taken
- where a person has been appointed but has not yet commenced duty
- to be filled by staff from contract labour agencies
- for jobs available only to persons already employed by the enterprise or organisation.

For information about scope exclusions applying to employer surveys, refer to paragraph 35 of the Explanatory Notes.

## **Labour force**

The labour force is the labour supply available for the production of economic goods and services in a given period, and is the most widely used measure of the economically active population. Persons in the labour force are classified as either employed or unemployed according to their activities during the reference period by using a specific set of priority rules.

### **Labour force status**

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

### **Labour force underutilisation rate**

The unemployed plus the underemployed, as a percentage of the labour force.

### **Local government employees**

Employees of municipalities and shires and other local authorities created by or subject to the provisions of local government legislation, such as county councils in New South Wales.

### **Lone parent**

A person who has no spouse or partner present in the household but who forms a parent-child relationship with at least one dependent or non-dependent child usually resident in the household.

### **Lone person**

A person who makes provision for their food and other essentials for living, without combining with any other person to form part of a multi-person household. They may live in a dwelling on their own or share a dwelling with another individual or family.

### **Long-term unemployed**

Persons unemployed for 12 months or more. See **duration of unemployment** for details of the calculation of duration of unemployment.

### **Long-term unemployment rate**

The number of long-term unemployed persons expressed as a percentage of the labour force.

### **Marginal attachment to the labour force**

Persons who were not in the labour force in the reference week, wanted to work, and:

- were actively looking for work but did not meet the availability criteria to be classified as unemployed or
- were not actively looking for work but were available to start work within four weeks or could start work within four weeks if child care was available.

The criteria for determining those in the labour force are based on activity (i.e. working or looking for work) and availability to start work during the reference week. The criteria associated with marginal attachment to the labour force, in particular the concepts of wanting to work and reasons for not actively looking for work, are more subjective. Hence, the measurement against these criteria is affected by the respondent's own interpretation of the concepts used. An individual respondent's interpretation may be affected by their work aspirations, as well as family, economic and other commitments.

#### **Marital status**

See **social marital status**.

#### **Mean age**

The sum of the ages of all the persons in a group, divided by the total number of persons in that group.

#### **Mean duration of unemployment**

The sum of the duration of unemployment of all the unemployed persons in a group, divided by the total number of unemployed persons in that group.

#### **Median age**

The age which divides a group of persons into two equal groups: one comprising persons whose age is above the median; and the other, persons whose age is below it.

#### **Median duration of unemployment**

The duration which divides unemployed persons into two equal groups: one comprising persons whose duration of unemployment is above the median; and the other, persons whose duration is below it.

#### **Non-dependent child**

A child of a couple or lone parent usually resident in the household, aged over 15 years and who is not a dependent student aged 15-24 years, and who has no partner or child of their own usually resident in the household.

#### **Non-family member**

A person who is not related to any other member of the household in which they are living.

#### **Not in the labour force**

Persons who were not classified as employed or unemployed.

#### **Occupation**

An occupation is a collection of jobs that are sufficiently similar in their main tasks to be grouped together for the purposes of classification. Occupation is classified according to the **ASCO Australian Standard Classification of Occupations, Second Edition** (cat. no. 1220.0). The occupation assigned to an employed person relates to the person's main job. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the occupation of their most recent job.

#### **One-parent family**

A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household.

#### **Ordinary time earnings**

See **weekly ordinary time earnings**.

#### **Original series**

Estimates produced directly from the survey data, before seasonal adjustment or trend estimation takes place.

## **Other family**

Related individuals residing in the same household who do not form a couple or parent-child relationship with any other person in the household and are not attached to a couple or one parent family in the household. If two brothers, for example, are living together and neither is a spouse, a lone parent or a child, then they are classified as other family.

## **Overtime earnings**

See **weekly overtime earnings**.

## **Own-account worker**

A person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees.

## **Participation rate**

The labour force participation rate for any group within the population is the labour force component of that group, expressed as a percentage of the population in that group.

## **Part-time employed**

**Household surveys.** Persons employed part-time are those employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

## **Reason for leaving last job**

Unemployed persons who had worked for two weeks or more in the past two years classified by whether they left that job voluntarily, that is, job leavers; or left that job involuntarily, that is, job losers.

## **Seasonally adjusted series**

A time series of estimates with the estimated effects of normal seasonal variation removed. See paragraphs 7-13 of the Explanatory Notes for more detail.

## **Social marital status**

Social marital status is the relationship status of an individual with reference to another person who is usually resident in the household. A marriage exists when two people live together as husband and wife, or partners, regardless of whether the marriage is formalised through registration. Individuals are, therefore, regarded as married if they are in a de facto marriage, or if they are living with the person to whom they are registered as married.

## **State capital cities**

The areas determining the six state capital cities are the Statistical Divisions for those capital cities defined in the **Statistical Geography: Volume 1 - Australian Standard Geographical Classification (ASGC)** (cat. no. 1216.0).

## **State government employees**

Employees of all State government departments and authorities created by, or reporting to, State Parliaments, including organisations for which the Commonwealth has assumed financial responsibility. Following self-government, the Northern Territory and the Australian Capital Territory administrations have been classified to State Governments. Employees of State Governments employed interstate are included in the estimates of the State in which they are based.

## **Status in employment**

Employed persons classified by whether they were employees, employers, own account workers or contributing family workers.

## **Total earnings**

See **weekly total earnings**.

## **Total hourly rates of pay index excluding bonuses**

**Wage Price Index.** This index measures quarterly change in a weighted combination of ordinary time and overtime hourly rates of pay. See **Labour Price Index, Australia** (cat. no. 6345.0) for more information.

## **Trend series**

A smoothed seasonally adjusted series of estimates. See paragraphs 7-13 of the Explanatory Notes for more detail.

## **Underemployed workers**

Underemployed workers are employed persons who want, and are available for, more hours of work than they currently have. They comprise:

- persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey
- persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.

## **Underemployment rate**

The number of underemployed workers expressed as a percentage of the labour force.

## **Unemployed**

Persons aged 15 years and over who were not employed during the reference week, and

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week, or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

## **Unemployed looking for first full-time job**

Unemployed persons looking for full-time work who had never worked full-time for two weeks or more.

## **Unemployed looking for first job**

Unemployed persons who had never worked for two weeks or more.

## **Unemployed looking for full-time work**

Unemployed persons who:

- actively looked for full-time work, or
- were waiting to start a new full-time job.

## **Unemployed looking for part-time work**

Unemployed persons who:

- actively looked for part-time work only, or
- were waiting to start a new part-time job.

## **Unemployment rate**

The number of unemployed persons expressed as a percentage of the labour force.

## **Unemployment to population ratio**

For any group, the number of unemployed persons expressed as a percentage of the civilian population aged 15 and over in the same group.

### Usual hours worked

The hours usually worked per week by an employed person.

### Wage and salary earners

See **employee**.

### Weekly ordinary time earnings

Weekly ordinary time earnings refers to one week's earnings of employees for the reference period attributable to award, standard or agreed hours of work, calculated before taxation and any other deductions (e.g. superannuation, board and lodging) have been made. Included are piecework payments and one week's portion of regular production and task bonuses and commissions. Excluded are overtime payments and payments not related to the reference period, e.g. bonus payments for earlier periods of work.

### Weekly overtime earnings

Weekly overtime earnings refers to payment for hours worked in the reference week in excess of award, standard or agreed hours of work, calculated before taxation and any other deductions (e.g. superannuation) have been made.

### Weekly total earnings

Weekly total earnings of employees is equal to weekly ordinary time earnings plus weekly overtime earnings.

### Working days lost

Refers to working days lost by employees directly and indirectly involved in the dispute.

### Working days lost per thousand employees

Calculated for a quarterly period by dividing the total number of working days lost in the period by the total number of employees in the Australian labour force in the period (obtained from the ABS Labour Force Survey) and multiplying by 1,000.

## Abbreviations

### ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
ATO	Australian Taxation Office
AWE	average weekly earnings
EEH	Survey of Employee Earnings and Hours
GDP	gross domestic product
ID	industrial disputes
ILO	International Labour Organization
LFS	Labour Force Survey
LPI	labour price index
MPS	Monthly Population Survey
qtr	quarter
RSE	relative standard error
SACC	Standard Australian Classification of Countries
SEE	Survey of Employment and Earnings
WPI	wage price index

## Data Sources for Tables (Appendix)

### APPENDIX 1 DATA SOURCES FOR TABLES

#### HOW TO FIND DATA SOURCES

To find a publication on the ABS web site, go to <<https://www.abs.gov.au>> [AusStats - Publications and Data - Publications]. Publications can

be accessed by catalogue number and subject e.g. to find the publication **Labour Force, Australia** (cat. no. 6202.0), look under '62. Labour force'. Catalogue numbers are listed under the relevant subject listing.

Similarly, to find spreadsheets and data cubes, go to <<https://www.abs.gov.au>> [AusStats - Publications and Data], then [Data Cubes] or [Time Series Spreadsheets]. Individual numbered spreadsheets and data cubes are listed under the catalogue number. Monthly, quarterly and annual products are listed separately.

No.	Table description	Data source	Notes
1.1	Trend	Labour Force, Australia (cat. no. 6202.0)	
1.2	Age by marital status	6202.0.55.001 spreadsheet table 1	
1.3	States and territories	6291.0.55.001 spreadsheet table 1	
1.3	States and territories	Labour Force, Australia (cat. no. 6202.0)	Excludes Capital city/balance of state
		6291.0.55.001 spreadsheet table 2	
1.4	Educational attendance	6291.0.55.001 spreadsheet table 3	More detailed Age
1.5	Country of birth	6291.0.55.001 data cube LM4	Includes Sex, State, less detailed Country of birth
		6291.0.55.001 data cube LM5	Includes Sex, Age, State, less detailed Country of birth
		6291.0.55.001 data cube LM6	Includes Sex, State
		6291.0.55.001 data cube LM7	Includes Sex, State, less detailed Country of birth
	Year of arrival	6291.0.55.001 data cube LM4	Includes Sex, State, less detailed Country of birth
		6291.0.55.001 data cube LM7	Includes Sex, State, less detailed Country of birth
1.6	Relationship in household	6291.0.55.001 data cube FM1	Includes State
		6291.0.55.001 data cube FM2	Includes Age
		6291.0.55.001 data cube FM3	Includes Hours worked
		6291.0.55.001 data cube FM4	Unemployed persons only, includes Duration of unemployment
1.7	Families	6224.0.55.001 data cube FA2	June data only
1.8	International comparisons	International Labour Organisation, Year Book of Labour Statistics 1998, 2000, 2001 and 2002	
		International Labour Organisation, Key Indicators of the Labour Market 2001-02	
		International Labour Organisation, LABORSTA database: <a href="http://laborsta.ilo.org">http://laborsta.ilo.org</a>	
2.1	Industry: trend	6291.0.55.001 spreadsheet table 4	Includes Employed full-time, Employed part-time
2.2	Industry: divisions and subdivisions	6291.0.55.001 spreadsheet table 6	
		6291.0.55.001 data cube E03	Includes Sex, State, Hours worked, less detailed Industry
		6291.0.55.001 data cube E05	Includes Sex, Age, Status in employment, Hours worked
		6291.0.55.001 data cube E06	Includes Sex, State, Status in employment, Hours worked, more detailed Industry
2.3	Occupation	6291.0.55.001 spreadsheet table 7	Less detailed Occupation
		6291.0.55.001 spreadsheet table 12	Includes Hours worked, less detailed Occupation
		6291.0.55.001 data cube E07	Includes Age, Hours worked, Status in employment
		6291.0.55.001 data cube E08	Includes State, Status in employment, more detailed Occupation
2.4	Industry and occupation by full-time/part-time status	6291.0.55.001 data cube E09	Includes State, Hours worked
2.5	Industry by status in employment	6291.0.55.001 data cube E04	Includes Sex, State, excludes Industry
		6291.0.55.001 data cube E05	Includes Sex, Age, more detailed Industry
		6291.0.55.001 data cube E06	Includes Sex, State, more detailed Industry
	Occupation by status in employment	6291.0.55.001 data cube E04	Includes Sex, State, excludes Occupation
		6291.0.55.001 data cube E07	Includes Sex, Age, more detailed Occupation
		6291.0.55.001 data cube E08	Includes Sex, State, more detailed Occupation
	Hours worked in all jobs by status in employment	6291.0.55.001 spreadsheet table 8	Excludes Hours worked, includes Sex, Employed full-time, Employed part-time
		6291.0.55.001 spreadsheet table 13	Includes Sex
		6291.0.55.001 data cube E04	Includes Sex, State
		6291.0.55.001 data cube E05	Includes Sex, Age, Industry
		6291.0.55.001 data cube E06	Includes Sex, State, Industry
		6291.0.55.001 data cube E07	Includes Sex, Age, Occupation
		6291.0.55.001 data cube E08	Includes Sex, State, Occupation
2.6	Average hours worked in all jobs by Industry	6291.0.55.001 spreadsheet table 11	
		6291.0.55.001 data cube E03	Includes State
		6291.0.55.001 data cube E05	Includes Age, Status in employment, more detailed Industry
		6291.0.55.001 data cube E06	Includes State, Status in employment, more detailed Industry
		6291.0.55.001 data cube E09	Includes State, Occupation
	Average hours worked in all jobs by occupation	6291.0.55.001 spreadsheet table 12	



	6291.0.55.001 data cube E07	Includes Age, Status in employment, more detailed Occupation
	6291.0.55.001 data cube E08	Includes State, Status in employment, more detailed Occupation
	6291.0.55.001 data cube E09	Includes State, Industry
2.7 Actual hours worked in all jobs	6291.0.55.001 spreadsheet table 9	
	6291.0.55.001 spreadsheet table 11	Includes Industry
	6291.0.55.001 spreadsheet table 12	Includes Occupation
	6291.0.55.001 spreadsheet table 13	Includes Status in employment
	6291.0.55.001 data cube EM1	Includes Age, State
	6291.0.55.001 data cube E03	Includes State, Industry
	6291.0.55.001 data cube E04	Includes State, Status in employment
2.8 Actual hours worked in all jobs	6291.0.55.001 spreadsheet table 9	
	6291.0.55.001 spreadsheet table 11	Includes Industry
	6291.0.55.001 spreadsheet table 12	Includes Occupation
	6291.0.55.001 spreadsheet table 13	Includes Status in employment
	6291.0.55.001 data cube EM1	Includes Age, State
	6291.0.55.001 data cube E03	Includes State, Industry
	6291.0.55.001 data cube E04	Includes State, Status in employment
Usual hours worked in all jobs	6291.0.55.001 spreadsheet table 10	
	6291.0.55.001 data cube EM3	Includes Age, State
	6291.0.55.001 data cube E10	Includes State, Industry
2.9 Full-time workers who worked less than 35 hours in all jobs	6291.0.55.001 data cube EM2	Includes Age, State, Hours worked
2.10 Future employment expectations by job tenure	6291.0.55.001 data cube E02	Excludes Future employment expectations, includes State, Age
2.11 Public sector employees	Wage and Salary Earners, Public Sector, Australia (cat. no. 6248.0.55.001)	
Public sector employees: Australia totals	6248.0.55.001 spreadsheet table 1	Includes State
Public sector employees by level of government: trend	6248.0.55.001 spreadsheet table 2	Includes Commonwealth government, State, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 3	Includes State government, State, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 4	Includes Local government, State, seasonally adjusted and original data
Public sector employees by State: trend	6248.0.55.001 spreadsheet table 1	Includes seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 2	Includes Commonwealth government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 3	Includes State government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 4	Includes Local government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 7a	Includes Industry
Public sector employees by industry: original	6248.0.55.001 spreadsheet table 7a	Includes State
3.1 Unemployed persons: duration of unemployment by age	6291.0.55.001 data cube UM2	Excludes Age, median Duration of unemployment
	6291.0.55.001 data cube UM3	Excludes median Duration of unemployment
3.2 Long-term unemployed	6291.0.55.001 spreadsheet table 15	
	6291.0.55.001 data cube UM2	Excludes trend data, includes State, more detailed Duration of unemployment
	6291.0.55.001 data cube UM3	Excludes trend data, includes State, Age
3.3 Unemployed persons: reason for unemployment by industry of last job	6291.0.55.001 data cube UQ1	Excludes Industry of last job
	6291.0.55.001 data cube UQ2	Excludes Reason for unemployment
Unemployed persons: reason for unemployment by occupation of last job	6291.0.55.001 data cube UQ1	Excludes Occupation of last job
	6291.0.55.001 data cube UQ3	Excludes Reason for unemployment
4.1 Underutilised labour	6105.0 spreadsheet table 1	
4.2 Underutilised labour	6105.0 spreadsheet table 1	
4.3 Underutilised labour	6105.0 spreadsheet table 1	
4.4 Part-time workers	6291.0.55.001 data cube E01	Less detailed Hours worked
4.5 Persons not in the labour force	6291.0.55.001 data cube NM1	
5.1 Labour price index	Labour Price Index, Australia (cat. no. 6345.0)	
Labour price index: trend data	6345.0 spreadsheet table 1B	
Labour price index: Australia, states and territories	6345.0 spreadsheet table 2B	
Labour price index: private sector	6345.0 spreadsheet table 3B	Includes States and territories
Labour price index: public sector	6345.0 spreadsheet table 4B	Includes States and territories
Labour price index: industry	6345.0 spreadsheet table 5B	Includes Sector
Labour price index: occupation	6345.0 spreadsheet table 7B	Includes Sector
5.2 Average weekly earnings	Average Weekly Earnings, Australia (cat. no. 6302.0)	
Average weekly earnings by sex	6302.0 spreadsheet table 1	Includes Full-time adult total earnings
Average weekly earnings: private sector	6302.0 spreadsheet table 4	Includes Full-time adult total earnings
Average weekly earnings: public sector	6302.0 spreadsheet table 7	Includes Full-time adult total earnings
5.3 Compensation of employees	Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0)	
6.1 Industrial disputes: working days lost	Industrial Disputes, Australia (cat. no. 6321.0.55.001)	

	Industrial disputes: working days lost by state	6321.0.55.001 spreadsheet table 3a
	Industrial disputes: working days lost by industry	6321.0.55.001 spreadsheet table 2a
6.2	Industrial disputes: working days lost per 1,000 employees	Industrial Disputes, Australia (cat. no. 6321.0.55.001)
	Industrial disputes: working days lost per 1,000 employees by state	6321.0.55.001 spreadsheet table 3b
	Industrial disputes: working days lost per 1,000 employees by industry	6321.0.55.001 spreadsheet table 2b
7.1	Job vacancies	Job Vacancies, Australia (cat. no. 6354.0)
	Job vacancies: Australia, states and territories	6354.0 spreadsheet table 1C

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## List of Articles (Appendix)

### APPENDIX 2 LIST OF ARTICLES

October 2005

Job starters

Comparison of ABS measures of employee remuneration

Spotlight: Employment type

Technical report: Standard error models for the Labour Force Survey

Technical report: Proposals from the review of ABS working arrangements statistics

July 2005

Full-time and part-time participation in Australia: a cohort analysis

Population, participation and productivity: contributions to Australia's economic growth

Spotlight: Employee share schemes

Technical report: Changes to coding processes for industry and occupation in the Labour Force Survey

April 2005

People who work few hours

Health, disability, age and labour force participation

Spotlight: Methods of setting pay

Spotlight: Annual measures of labour underutilisation

January 2005

Labour force participation in Australia

Experimental estimates of the average age at withdrawal from the labour force

Spotlight: Employment in information and communication technology (ICT)

Spotlight: Labour Price Index

Technical report: Implementation of computer assisted interviewing in the Labour Force Survey

October 2004

Changes in types of employment

Mature age people and the labour force

July 2004

Children living without an employed parent

Labour underutilisation

Spotlight: Industrial disputes

Technical report: Labour Force Survey regions

April 2004

Job search experience: methods and barriers in finding jobs

Trade union membership

Spotlight: Occupation

Technical report: Improvements to labour force estimates

January 2004

Employment in information and communication technology

Labour force participation: international comparison

Technical report: Changes to Labour Force Survey seasonal adjustment processes

October 2003

Labour market transitions of teenagers

Spotlight: Country of birth

Spotlight: Multiple job holders

Technical report: New Labour Force Survey sample selections: analysis of the effect on estimates

July 2003

Experimental volume measures of labour underutilisation

Unemployment and participation rates in Australia: a cohort analysis

Spotlight: Population, participation and productivity: contributions to Australia's economic growth

Technical report: Measures of weekly hours worked

April 2003

Do job vacancies provide a leading indicator of employment growth?

## **Characteristics of underemployed workers**

**Spotlight: Parental leave**

**Spotlight: Methods of setting pay**

**Technical report: Labour Force Survey sample redesign**

Note: the following articles appeared in **Labour Force, Australia** (cat. no. 6203.0).

**December 2002**

**Volatility of labour force estimates**

**October 2002**

**Measures of labour underutilisation**

**February 2002**

**Seasonal reanalysis of monthly labour force estimates**

**October 2001**

**Full-time and part-time employment**

**August 2001**

**Experimental estimates: labour force characteristics of Indigenous Australians**

**June 2001**

**Duration of unemployment: recent definitional changes**

**February 2001**

**Unemployment and supplementary measures of underutilised labour**

**May 2000**

Status in employment data changes: correction

**April 2000**

**Using the unemployment rate series to illustrate the seasonal adjustment process**

**December 1999**

**Why are there differences between two seasonally adjusted measures of Australian total employment?**

**November 1999**

**Industry, occupation and status in employment data**

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## **Related Publications (Appendix)**

## APPENDIX 3 RELATED PUBLICATIONS

Title	cat. no.	Frequency	Latest issue
Information papers and other reference material			
ABS Labour Market Statistics	6106.0.55.001	Irregular	2003
Australian System of National Accounts: Concepts, Sources & Methods	5216.0	Irregular	2000
Changes to Labour Force Survey Products	6297.0	Irregular	2003
Forthcoming Changes to Labour Force Statistics	6292.0	Irregular	2003
Labour Force Survey Sample Design	6269.0	Irregular	2002
Labour Force Survey Standard Errors	6298.0	Irregular	2005
Labour Price Index: Statistics Concepts, Sources & Methods	6351.0.55.001	Irregular	2004
Labour Statistics: Concepts, Sources & Methods	6102.0.55.001	Irregular	ABS web site, 2005
Questionnaires Used in the Labour Force Survey	6232.0	Irregular	2004
Labour force supplementary surveys			
Career Experience	6254.0	Irregular	Nov 2002
Child Care	4402.0	Irregular	Jun 2002
Education & Work	6227.0	Annual	May 2005
Employee Earnings, Benefits & Trade Union Membership	6310.0	Annual	Aug 2004
Forms of Employment	6359.0	Irregular	Nov 2004
Job Search Experience	6222.0	Annual	Jul 2005
Labour Force Experience	6206.0	Biennial	Feb 2005
Labour Force Status & Other Characteristics of Families	6224.0.55.001	Annual	Jun 2005
Labour Force Status & Other Characteristics of Migrants	6250.0	Irregular	Nov 2004
Labour Mobility	6209.0	Biennial	Feb 2004
Locations of Work	6275.0	Irregular	Jun 2000
Multiple Jobholding(a)	6216.0	Discontinued	Final issue 2000
Persons Not in the Labour Force	6220.0	Annual	Sep 2004
Retirement & Retirement Intentions	6238.0	Irregular	Nov 1997
Retrenchment & Redundancy(b)	6266.0	Discontinued	Final issue 2001
Underemployed Workers	6265.0	Annual	Sep 2004
Work-Related Injuries	6324.0	Irregular	Sep 2000
Working Arrangements	6342.0	Irregular	Nov 2003
Sub-annual labour surveys			
Average Weekly Earnings	6302.0	Quarterly	Aug 2005
Industrial Disputes	6321.0.55.001	Quarterly	Sep qtr 2005
Job Vacancies	6354.0	Quarterly	Aug 2005
Labour Force	6202.0	Monthly	Nov 2005
Labour Price Index	6345.0	Quarterly	Sep qtr 2005
Wage & Salary Earners, Public Sector	6248.0.55.001	Quarterly	Sep qtr 2005
Other labour surveys			
Employee Earnings & Hours	6306.0	Biennial	May 2004
Employer Training Expenditure & Practices	6362.0	Irregular	2001-02
Labour Costs	6348.0.55.001	Irregular	2002-03
Confidentialised Unit Record Files			
Employment Arrangements and Superannuation, Australia: Confidentialised Unit Record File	6361.0.55.001	Irregular	Apr to Jun 2000
Employment Arrangements and Superannuation, Australia: Confidentialised Unit Record File, Technical Paper	6361.0.55.002	Irregular	Apr to Jun 2000
Australians' Employment and Unemployment Patterns, 1994-1997: Expanded Confidentialised Unit Record File	6286.0.55.001	Irregular	1994 to 1997
Australians' Employment and Unemployment Patterns: Expanded Confidentialised Unit Record File, Technical Paper	6286.0.55.002	Irregular	1994 to 1997
Labour Force Survey and Employee Earnings, Benefits and Trade Union Membership, Australia: Basic	6202.0.30.001	Biennial	Aug 2004
Confidentialised Unit Record File			
Labour Force Survey and Employee Earnings, Benefits and Trade Union Membership, Australia-Basic Confidentialised	6202.0.30.002	Biennial	Aug 2004
Unit Record File, Technical Paper			
Other publications			
Australian Economic Indicators	1350.0	Monthly	Dec 2005
Australian National Accounts: National Income, Expenditure & Product	5206.0	Quarterly	Sep 2005
Australian Social Trends	4102.0	Annual	2005
Australian System of National Accounts	5204.0	Annual	2004-05
Australians' Employment & Unemployment Patterns: First Results	6286.0	Irregular	1994 to 1997
Business Indicators	5676.0	Quarterly	Sep 2005
Census of Population & Housing: Selected Education & Labour Force Statistics	2017.0	Irregular	2001
Education & Training Indicators	4230.0	Irregular	2002
Employment Arrangements & Superannuation	6361.0	Irregular	Apr to Jun 2000
General Social Survey	4159.0	Irregular	2002
Government Benefits, Taxes & Household Income	6537.0	Irregular	1998-99
Household Income & Income Distribution	6523.0	Irregular	2003-04
Measures of Australia's Progress	1370.0	Irregular	2004
Regional Wage & Salary Earners - Electronic Publication	5673.0.55.001	Annual	2000-01
Superannuation: Coverage & Financial Characteristics	6360.0	Irregular	Apr to Jun 2000
Voluntary Work	4441.0	Irregular	2000

(a) Latest data available on request for July 2001.

(b) Related data available from Labour Mobility.

## Jan of Tables (Appendix)

The tables listed below are included in the publication Australian Labour Market Statistics (cat. no. 6105.0). Electronic sources of the data in these tables can be found in Appendix 1.

### LIST OF TABLES

#### THE LABOUR FORCE

- 1.1 Labour force status: trend series
- 1.2 Age by social marital status
- 1.3 States and territories, and capital cities
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## 1.8 International comparisons

### EMPLOYED PERSONS

- 2.1 Industry: trend series
- 2.2 Industry division and subdivision
- 2.3 Occupation major groups and sub-major groups
- 2.4 Industry and occupation by full-time/part-time status
- 2.5 Industry and occupation by status in employment
- 2.6 Actual hours worked: industry and occupation
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- 2.8 Actual and usual hours worked
- 2.9 Full-time workers who worked less than 35 hours
- 2.10 Future employment expectations by job tenure
- 2.11 Public sector employees

### UNEMPLOYED PERSONS

- 3.1 Duration of unemployment by age
- 3.2 Long-term unemployed persons: trend series
- 3.3 Reason for unemployment by industry and occupation of last job

### UNDERUTILISED LABOUR

- 4.1 Labour underutilisation: population counts and rates
- 4.2 Labour underutilisation: age
- 4.3 Labour underutilisation: states and territories
- 4.4 Part-time workers: whether preferred to work more hours
- 4.5 Persons not in the labour force: whether looking for work

### EARNINGS

- 5.1 Wage price index
- 5.2 Average weekly earnings: trend series
- 5.3 Compensation of employees and related measures: trend series

### INDUSTRIAL RELATIONS

- 6.1 Industrial disputes: working days lost
- 6.2 Industrial disputes: working days lost per 1,000 employees

### JOB VACANCIES

- 7.1 Job vacancies